UniversitätsKlinikum Heidelberg

„40 Seconds of Compassion“

Cancer Patients’ Response to Patient-Centered Communication.

Results from a Quasi-Experimental Study

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Can 40 Seconds of Compassion Reduce Patient Anxiety?

By Linda A. Fogarty, Barbara A. Curbow, John R. Wingard, Karen McDonnell, and Mark R. Somerfield

Purpose: To use a standardized videotape stimulus to assess the effect of physician compassion on viewers' anxiety, information recall, treatment decisions, and assessment of physician characteristics.

Participants and Methods: One hundred twenty-three healthy female breast cancer survivors and 87 women without cancer were recruited for this study. A randomized pretest/posttest control group design with a standardized videotape intervention was used. Participants completed the State-Trait Anxiety Inventory (STAI), an information recall test, a compassion rating, and physician attribute rating scales.

Results: Women who saw an "enhanced compassion" videotape rated the physician as warmer and more caring, sensitive, and compassionate than did women who watched the "standard" videotape. Women who saw the enhanced compassion videotape were significantly less anxious after watching it than the women in the other group. Nevertheless, information recall was relatively low for both groups, and enhanced compassion did not influence patient decisions. Those who saw the enhanced compassion videotape rated the doctor significantly higher on other positive attributes, such as wanting what was best for the patient and encouraging the patient's questions and involvement in decisions.

Conclusion: The enhanced compassion segment was short, simple, and effective in decreasing viewers' anxiety. Further research is needed to translate these findings to the clinical setting, where reducing patient anxiety is a therapeutic goal.

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Fogarty et al. (1999) „40 seconds of compassion“ - 1

- first experimental study which assessed the effects of physician compassion on patients’ anxiety
- 123 female breast cancer survivors vs. 87 women without cancer
- randomized pre-posttest design
- a standardized videotape intervention of two different video versions of a doctor-patient consultation (standard vs. enhanced compassion)

Fogarty et al. (1999) „40 seconds of compassion“ - 2

- women who saw the enhanced video tape were less anxious than women who saw the standard tape
- they rated the doctor higher on positive attributes: warmer, more sensitive, caring, compassionate
- no results regarding information recall

A new version of Fogarty's work

- experimental study: videotape intervention
- randomized pre-post test design
- changed topic: disclosure of a cancer diagnosis instead of treatment decision
- variation of the communication concept: patient-centered communication (PCC) behavior instead of compassion only

A new version of Fogarty's work

- patients' emotional response: state anxiety, mood, trust in physician and other physician characteristics
- impact of personal experience: cancer patients vs. subjects without cancer
- variations according disease, gender and age: men and women aged 20 to 78 with different tumor diseases

Video Intervention

- doctor-patient consultation with **disclosure of a cancer diagnosis** (high grade lymphoma)
- 2 different versions: **low vs. enhanced patient-centered communication** (PCC)
- operationalization of PCC according to **state of the art** => interaction rating systems: RIAS / VR-Codes
- checking of **interrater reliability** of 2 independent raters (Cohen's Kappa K= .70)

Low PCC Version

- **inhibiting behavior** (VR-CoDES-P, Zimmermann et al., 2011; Del Piccolo et al., 2011)
- response of the physician to the patients' cues: **'space-reducing'**, **shutting down**, **denying** or **blocking** (RIAS/VR-CoDES-P)
- Total length: 6:00 min; first sequence: 30 sec.; second sequence: 16 sec.; total difference: 46 sec.

Enhanced PCC Version

- **facilitating behavior** (VR-CoDES-P, Zimmermann et al., 2011; Del Piccolo et al., 2011)
- response of the physician to the patients' cues: **'providing space'**, with silence and explicit or implicit **empathy**, **validating the feelings** of the patient and **assuring** the further **continuity** of the attendance (RIAS/VRCoDES-P)
- Total length: 6:32 min; first sequence: 52 sec.; second sequence: 31 sec.; total difference: 83 sec.

Hypothesis 1

We expected:

an **increase in anxiety** and

a **decrease of mood**

following the **disclosure of a cancer diagnosis.**

Hypothesis 2

We expected:

a **lower degree of anxiety** and
mood disturbance

when the physician displays an **enhanced PCC behavior** compared to a **low PCC behavior**.

Hypothesis 3

We expected:

that **trust** in the physician and the **perception of the doctor** as „compassionate and caring“

is **higher with the enhanced PCC** compared to the low PCC.

Study Design

Recruitment:

- Collaborators from oncology clinics & cancer self-help groups
- Study requests: flyer & local newspapers

Phone Calls:

Screening for eligibility

Sample: N = 189

- clinical sample: N = 97
- non-clinical sample: N = 92

Randomization:

Video version 1 or 2 (blinded)

Criteria for stratification:

- Sample (clinical / non-clinical)
- Gender (men / women)
- Age (<34 years / 35 - 60 years / >61 years)

Pre-test Measures:

- Anxiety (STAI-S, Laux et al., 1981)
- Mood Scale (BfS, v. Zerssen, 1976, 2011)

Instruction:
„Please try to put yourself in the role of the patient in the video!“

Video exposure 1 or 2:

- Consultation between doctor and female patient
- Disclosure of a cancer diagnosis
- Length: 6-7 min.
- Version 1: low PCC, Version 2: enhanced PCC
- differences in 2 sequences of the consultation

Post-test Measures:

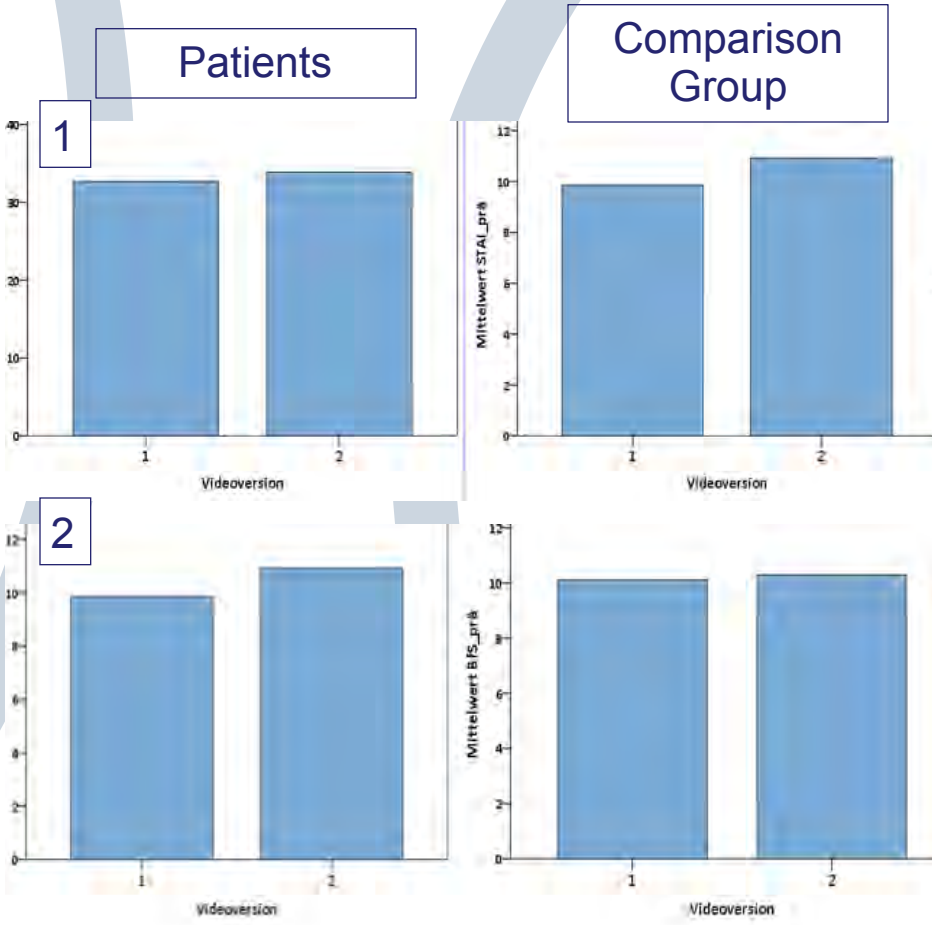
- Anxiety (STAI-S, Laux et al., 1981)
- Mood Scale (BfS, v. Zerssen, 1976, 2011)
- Trust in physician (KPF, Scheibler et al., 2011)
- Perception of physician attributes (semantic differential format, Tönnies et al., 2001)

Clinical Sample

- men and women with a **broad range of different tumor diseases**: breast cancer, prostate or testicle cancer, multiple myelomas or lymphomas
- we presumed a **minimal time-lag of six months** to their own date of diagnosis

Results

- Comparison of baseline conditions for STAI and BfS (ANOVA)
- no statistical differences in the baseline data of STAI-S (1) and BfS (2) for the two video versions, neither for the complete sample nor for the two subsamples



Hypothesis 1

We expected:

an **increase in anxiety** and

a **decrease of mood**

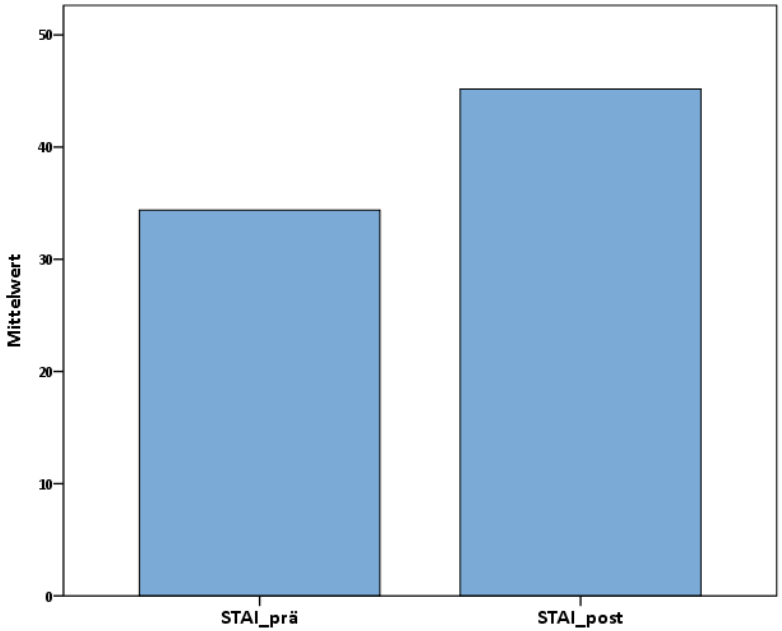
following the **disclosure of a cancer diagnosis.**

Results
Anxiety & Mood I

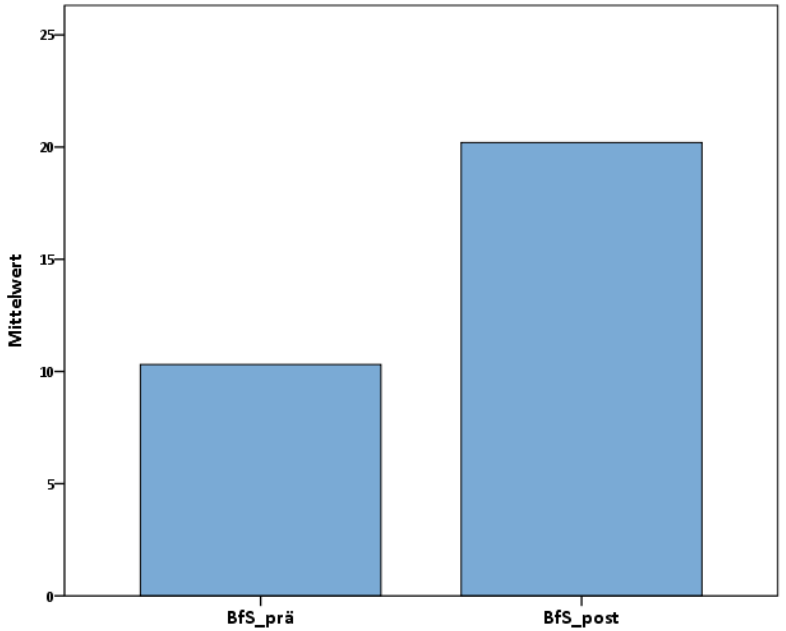
- pre-posttest differences regarding STAI-S and BfS among both samples
- significant increase in anxiety (t (188) = -13.15, p<.000) and a significant decrease in mood (t (188) = -10.27, p<.000)
- large effects for the STAI-S (Cohens d = 1.06) and for the BfS (d = 0.77)

Results
Anxiety & Mood I

STAI: Pre-post differences



BfS: Pre-post differences



- **Hypothesis 1 confirmed**

Hypothesis 2

We expected:

a **lower degree of anxiety** and
mood disturbance

when the physician displays an **enhanced PCC behavior** compared to a **low PCC behavior**.

Results
Anxiety & Mood II

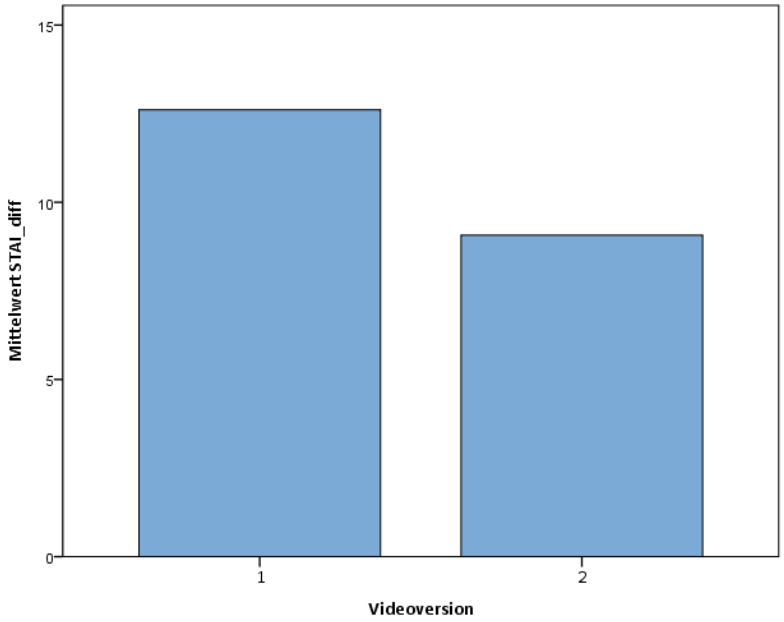
- t-tests for STAI and BfS with video version as IV
- significant effect for the delta values of the STAI-S

  (t (163) = 2.16, p<.033)
- video 1 (low PCC) increase of anxiety was higher than video 2 (enhanced PCC) => small effect (d = 0.32)

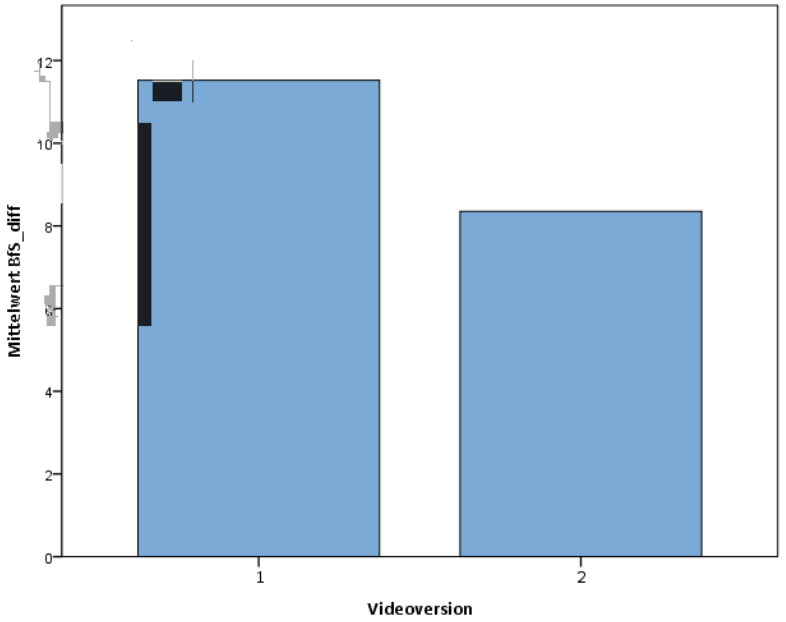
- for the BfS no significant difference, but a trend in the expected direction (t (169) = 1.64, p<.103)
- video 1 (low PCC) led to greater mood disturbance compared to video 2 => small effect (d = 0.24)

Results
Anxiety & Mood II

STAI:
Effects of video version



BfS:
Effects of video version



- **Hypothesis 2 confirmed**

Results
Anxiety & Mood II

- subsample analyses: no significant effect for the video version on the STAI-S, but a trend in the expected direction
- watching video 1 resulted in a higher increase of anxiety and mood disturbance (patients: $F(1,188) = 2.69$, $p<.104$; comparison group: $F(1,188) = 2.08$, $p<.153$)
- small effects; patients: d = 0.34; comparison: d = 0.30

Hypothesis 3

We expected:

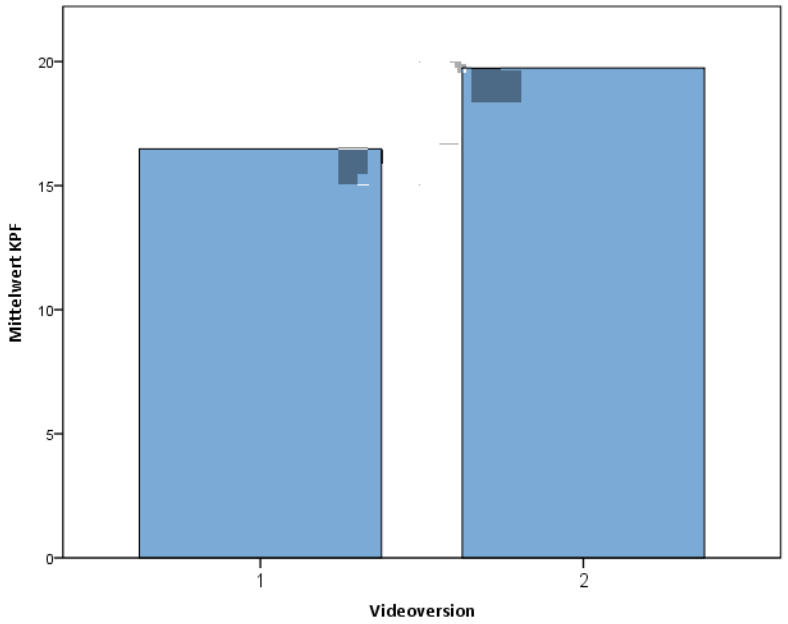
that **trust** in the physician and the **perception of the doctor** as „compassionate and caring“

is **higher with the enhanced PCC** compared to the low PCC.

Results
Trust

- t-test for KPF with video as IV
- significant effect: (t (187) = -4.87, p<.000)
- video 2 led to higher trust in the physician than video 1

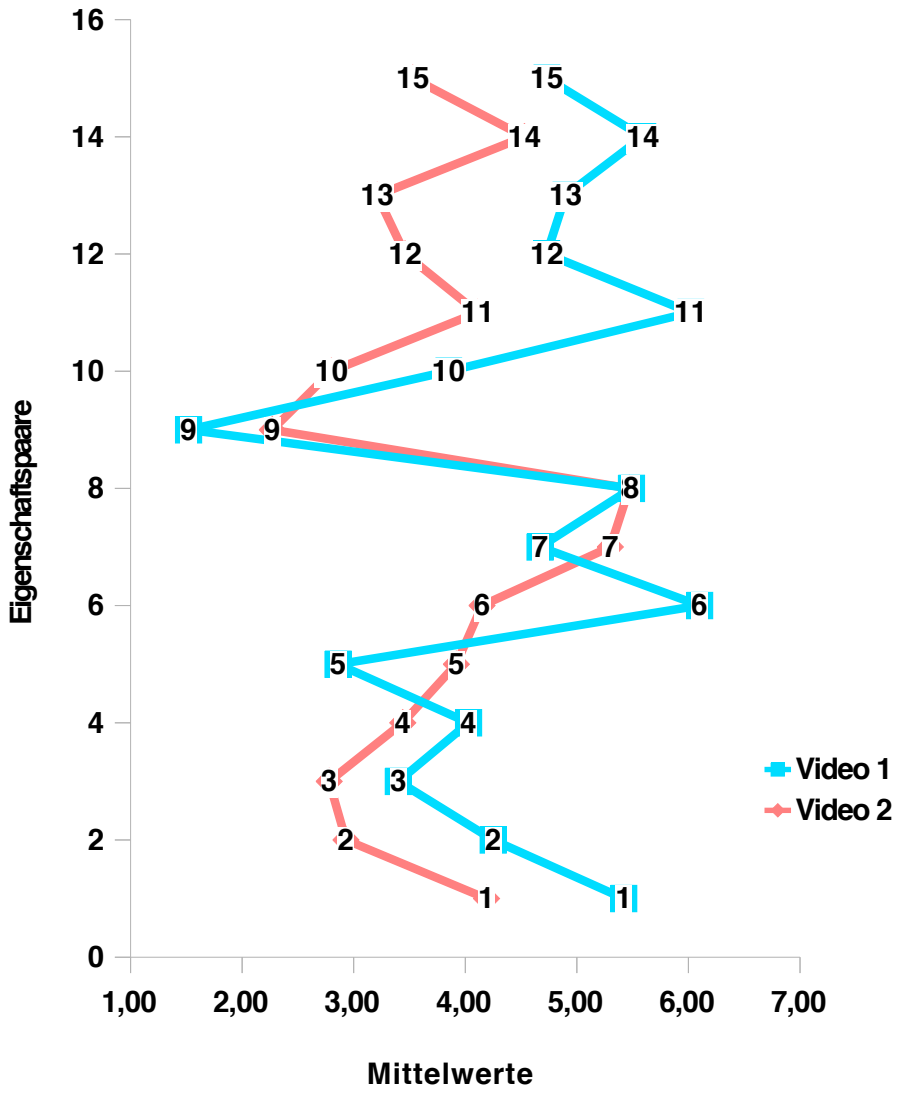
- subsample analysis: significant main effect for the factor video version (patients: $F(1,188) = 10.91$, p<.001; comparison: $F(1,188) = 13.12$, p<.000)
- moderate sized effects: patients: d = 0.68; comparison: d = 0.76



Results
Perception of physician attributes

1. **facing - distant $p < .001$***
2. **responsible - irresponsible $p < .000$***
3. clear - ambiguous $p < .321$ n.s.
4. critical - uncritical $p < .130$ n.s.
5. **cold - warm $p < .000$***
6. **sensible - unsensible $p < .000$***
7. **unqualified - qualified $p < .001$***
8. instable - stable $p < .294$ n.s.
9. **medically oriented - psychologically interested $p < .000$***
10. **efficient - superficial $p < .005$***
11. **compassionate - impassive $p < .000$***
12. **open - closed $p < .000$***
13. **appreciating - disregarding $p < .000$***
14. **encouraging - demoralizing $p < .002$***
15. **trusting - mistrusting $p < .000$***

profiles of physician attributes



Results
Perspective Taking

- Did anxiety vary according to the degree participants identified themselves with the patient?
- MANOVA with video version, sample and perspective taking as factors
- significant main effect of all factors on the STAI-S: the effect of video version and sample on the STAI-S was moderated by the amount of identification with the patient in the video patients: $F(5,188) = 2.34$, $p<.049$; comparison group: $F(5,188) = 3.88$, $p<.003$)

Conclusions

- similar to Fogarty's findings, we found that participants reacted with more anxiety and mood disturbance to the disclosure of a cancer diagnosis
- participants who saw the enhanced PCC video tape were less anxious than those who saw the low PCC tape (men and women, broader range of age and cancer diseases)

Conclusions

- participants reacted with less mood disturbance and more trust
- they rated the doctor higher on positive attributes, such as trusting, warm, compassionate, efficient, qualified or encouraging
- anxiety was moderated by the amount of identification with the patient in the video

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