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Impact of Nurse-Patient Relationship Building on Patient-Reported Well-Being in Patients with Colorectal Cancer: A Feasibility Study

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RESEARCH ARTICLE

Read the article for insight into

- The importance of the nurse-patient relationship.
- The feasibility and acceptability of both practising the Fundamentals of Care standardised intervention and conducting the study processes and procedures.
- A systematic approach to relationship building that may strengthen nurses' competencies within this important area.

Abstract

Aim

To evaluate the feasibility and acceptability of a nurse-patient relationship (NPR)-focused intervention based on the Fundamentals of Care framework and to explore its potential influence on patient well-being.

Background

The NPR is considered fundamental to high-quality nursing care. Although relational elements such as trust and focus are emphasised in theoretical frameworks, there is limited empirical evidence on the feasibility of systematically applying this approach in clinical practice.

Methods

This feasibility study was designed as a randomised controlled trial conducted in a gastroenterological ward at a Danish university hospital. Adult patients with colorectal cancer were randomised to either standard care or standard care plus an NPR-focused intervention delivered during the first nurse-patient encounter. Feasibility outcomes included recruitment, inclusion and response rates, time expenditure, and acceptability. Patient well-being was explored using the Edmonton Symptom Assessment Scale (ESAS).

Results

Eight patients participated (80% inclusion rate), and questionnaire completion was 100%. The intervention was feasible to implement and acceptable to both patients and the nurse, although minor challenges arose, e.g., due to a lack of standardisation. Exploratory analyses suggested a lower symptom burden in the intervention group, but the small sample size precludes conclusions regarding effectiveness.

Conclusion

The NPR-focused intervention appears feasible and acceptable in this clinical context. Minor design adjustments are recommended before conducting a full-scale study.

Clinical relevance

This provides a foundation for strengthening nurses' competencies by systematically building and maintaining the NPR through the five elements of relational building and by addressing barriers and facilitators in clinical practice.

Keywords: Nurse-patient relation, person-centred care, patient well-being, patient reported outcome measure, colorectal cancer, randomised controlled trial, feasibility study.

Background

The nurse-patient relationship (NPR) is widely recognised as a cornerstone of high-quality nursing care (1,2). National and international guidelines show that meaningful relational engagement supports patient involvement, strengthens trust, and enhances the continuity and safety of care (3,4).

Within the Fundamentals of Care framework, the NPR is described as central to delivering person-centred fundamental care, and its quality depends on several key relational elements (5). First, trust must be established; this is the foundation that enables patients to feel safe and willing to engage openly in their care. Next, nurses maintain focus by directing their attention toward the patient's individual needs, values, and lived experience.

Through clinical awareness and relational sensitivity, nurses Anticipate unspoken needs, supporting timely and compassionate responses. As the relationship develops, nurses come to know the patient as a whole person, allowing care to be tailored in meaningful and respectful ways. Throughout this process, nurses continually evaluate the quality of the relationship. The patient and the nurse should continuously review progress and give feedback to each other about how the relationship is progressing (5).

The NPR is the foundation upon which all nursing activities depend, as effective care cannot occur without first establishing a therapeutic relationship (5). Danish nursing education and ethical guidelines similarly highlight relational competence, empathy, and compassion as essential professional responsibilities (6–8).

A growing body of research links the quality of the NPR to important aspects of patient well-being, including psychological health, functional status, and experiences of hope and emotional support (9–11).

These outcomes are often captured through patient-reported outcome measures (PROMs), which are increasingly valued for their ability to reflect patients' own perspectives on their health and recovery (12,13).

This feasibility study includes patients with colorectal cancer admitted to a hospital ward following the recommendations for Enhanced Recovery After Surgery (ERAS) (14,15). Efforts to adhere to these recommendations may risk making nursing practice predominantly task-driven rather than person-centred. This potential shift underscores the need to test the feasibility of an NPR-focused approach in this specific clinical context.

The framework has been found to help nursing students recognise and value the clinical use of the FoC framework (16), but it has not yet been tested in a clinical setting. The model is theoretically robust, but evidence on how adherence to its elements influences patient outcomes is lacking. Therefore, we wanted to evaluate whether following the NPR model, as described by Feo et al. (5), is feasible in everyday practice and can improve patient well-being.

Method

Design

This feasibility study was based on an interventional study designed as a randomised controlled trial (RCT) (17,18). The study was conducted in a specialised gastroenterology ward at a university hospital located in the capital region of Denmark. We followed the Consolidated Standards of Reporting Trials (CONSORT) guidelines for pilot and feasibility trials (19) and addressed all relevant items on the checklist. The intervention in this feasibility RCT is carefully described in the TiDieR guidelines for reporting interventions (20).

Participants

Inclusion criteria were adults (≥ 18 years) diagnosed with colorectal cancer who were able to provide informed consent and had sufficient proficiency in Danish to understand the study information. Exclusion criteria were patients who were terminally ill or experiencing severe psychological distress. Eligible patients were approached and invited to participate. Patients were randomly assigned in a 1:1 ratio to either the intervention or control group using an electronic allocation application. Patients were allocated individually on the morning of the intervention.

The study was intended to be single-masked, as participants were not informed of their group allocation. However, some may have become aware of it during the study.

Control group

Patients in the control group received standard care without the systematic NPR building. Standard care generally followed the principles of Enhanced recovery after surgery (ERAS) (14,15). The ERAS Society provides evidence-based guidelines across surgical specialities. In this ward, the ERAS guidelines have been operationalised into specific clinical recommendations, such as mobilising out of bed for a predefined number of hours per day, administering multiple oral nutritional supplements, and using a positive expiratory pressure (PEP) device. The length of stay for this patient group is usually 2–5 days, although complications may prolong hospitalisation.

Intervention group

In addition to standard care, patients in the intervention group received a relationship-based intervention informed by the Fundamentals of Care framework, which emphasises the central role of the NPR in delivering high-quality care (5). The intervention was structured around the five core elements which collectively support the development of a trusting therapeutic relationship:

1. Trust.
2. Focus.
3. Anticipate.
4. Know.
5. Evaluate.

The intervention was delivered during the first encounter between the nurse and the patient, within the first 1.5 hours of an 8-hour morning shift. A dedicated time frame of 5-10 minutes was allocated in accordance with recommendations for the NPR development.

The duration of the time frame was chosen to enhance standardisation and accommodate what was practically feasible in the context. All five relational elements of the fundamentals of care framework were integrated, addressing as many of the specific recommendations as appropriate within the limited time frame.

The intervention involved being present, respectful, and compassionate toward the patient, showing genuine concern for their well-being. By actively listening to and observing verbal and non-verbal communication, the nurse gained insight into the patient and anticipated individual needs. This enabled the application of professional expertise and the provision of tailored recommendations. Throughout the interaction, the nurse continuously evaluated the quality of the relationship and considered opportunities for improvement.

More specifically, the nurse introduced herself by name and professional title and provided information about the shift duration. She briefly demonstrated awareness of key aspects of the patient's care trajectory (e.g., type and date of surgery and overall well-being). The nurse consistently showed genuine interest in the patient's situation. Subsequently, the nurse focused on the patient's situation by encouraging them to describe their experience and current condition while observing relevant physical and psychosocial aspects. This holistic focus supported the understanding of the patient and strengthened trust.

The nurse then shared relevant professional knowledge, including individual tailored ERAS recommendations. Mutual knowledge and trust are essential for establishing connectedness when planning the day collaboratively and for shaping anticipation of the relationship and the forthcoming activities.

Evaluation was conducted from a reflective perspective on the NPR, considering whether relational aspects require adjustment, including addressing potential gaps in understanding or mistrust on the patient's part.

Outcome

The primary outcomes of the study were feasibility and acceptability of the intervention and its associated research procedures. Feasibility was assessed, inspired by the specified criteria by Abbott J. (21), to examine the practicality and robustness of the study processes, including recruitment, randomisation, and data collection.

Feasibility criteria included:

1. An acceptable recruitment procedure.
2. An acceptable randomisation procedure.
3. An acceptable data collection procedure.
4. A participation rate of at least 75% among invited participants (22).
5. A questionnaire response rate of at least 75% (22).
6. An evaluation of the time expenditure required to deliver and participate in the intervention (21).

These indicators were used to determine whether the study procedures were manageable within the clinical context and whether progression to a larger trial would be justified.

Acceptability was evaluated to determine how both patients and nurses perceived the intervention and study procedures. Patient acceptability was assessed through participants' willingness to engage with the intervention and complete the study questionnaires, as well as their subjective evaluation of the intervention's relevance and burden.

The nurse's acceptability was assessed through experiences with delivering the intervention, including perceived usefulness, feasibility within the workflow, and the balance between identified barriers and facilitators. Together, these measures provided insight into the perceived value, practicality, and tolerability of the intervention.

The secondary outcome was the patient's self-reported well-being measured with the Edmonton Symptom Assessment Scale (ESAS) (23,24). ESAS is a brief 10-item questionnaire to get insight into patients' symptom burden or well-being among cancer patients. A higher score indicates worsening of symptoms (23). As this feasibility study was not powered to detect statistically significant effects, descriptive statistics and exploratory analyses were used to assess data handling and generate hypotheses.

Data collection process

Data on the primary outcome were collected the same day as providing either the intervention or standard care.

Part of the primary outcome consisted of measures such as response rates and time spent performing study procedures. The remaining part of the primary outcome was based on field notes on the experience of performing different study procedures, e.g., the feasibility of integrating the intervention into standard care.

Data on patient characteristics and the secondary outcome (ESAS) were also collected on the same day as patients received the intervention or usual care. Patient characteristics included sex, age, civil status, number of children and educational level. The researcher approached each participant individually and provided a printed questionnaire. After a brief explanation, participants were invited to complete the questionnaires, either with the researcher's assistance or independently.

Ethical considerations

This feasibility study adheres to the principles from the Declaration of Helsinki (23). Patients received both written and oral information about the purpose of the study, and it was emphasised that participation was entirely voluntary and safe, and that they had the right to withdraw from the study at any time without consequences for their care. Sensitive personal data were correctly and protectively kept. Written informed consent was obtained from all participants. As the study was conducted within the framework of an educational project, no additional approvals were required.

Sample size

Because this was a feasibility study, no sample size calculation was required.

Statistical analysis method

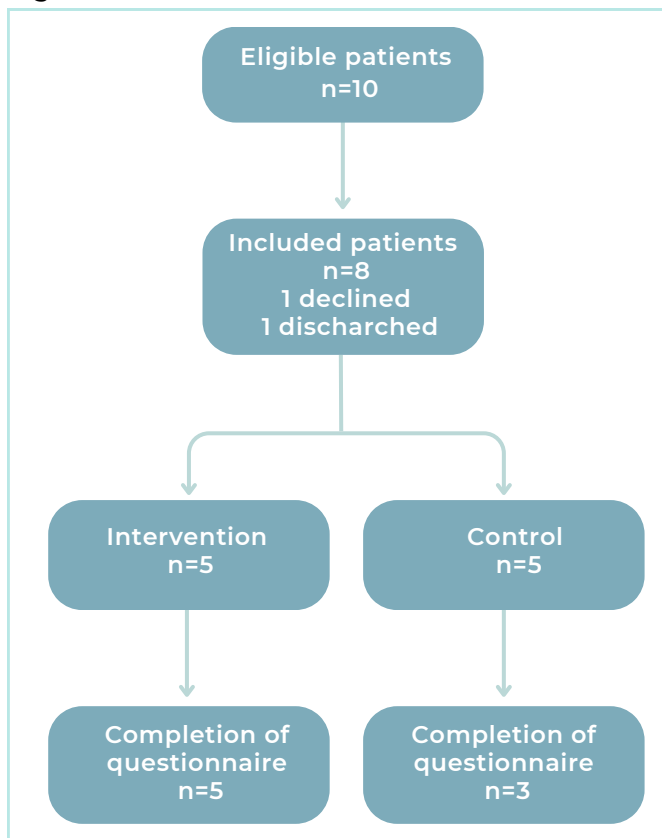
Data management and statistical analyses were performed using STATA/BE 17.0. Given the small sample size and the non-parametric nature of the data, analyses were limited to descriptive statistics (24). We reported medians and ranges for continuous variables and proportions for categorical variables. The secondary outcome (ESAS) was treated as a continuous, non-parametric measure.

For exploratory comparisons between groups, the Wilcoxon rank-sum test was used, as it is appropriate for small sample sizes and non-parametric distributions.

Results

The inclusion process is illustrated in the flow-chart, **Figure 1**, which shows that 10 patients were found to be eligible during the study period. Among those, one patient declined to participate, and one was discharged from the hospital, resulting in an 80% inclusion rate. Finally, eight patients participated in the feasibility study, and all eight completed the questionnaires, resulting in a 100% completion rate.

Figure 1. Flowchart. Patient selection and inclusion



Patient characteristics

The overall sample included eight participants and had a median age of 77.1. Most participants were women (62.5%), and most had completed higher education (62.5%).

Data on patient characteristics are presented in **Table 1**. The data are organised into two columns, intervention arm and control arm, to assess similarity between the two groups.

Table 1: Patient characteristics for the intervention group and control group

Variable	Intervention arm	Control arm
Number of observations, n (%)	5 (62.5)	3 (37.5)
Female, n (%)	2 (40)	3 (100)
Age (years), median (q1-q3)	72 (68.5;81.5)	82 (79;83.5)
Civil status		
Single, n (%)	1 (20)	3 (100)
Partnered/cohabiting, n (%)	4 (80)	0 (0)
Number of children, median	2 (0.5;4.5)	2 (2;2.5)
Educational level		
Ground school, n (%)	1 (20)	1 (33.3)
High school, n (%)	1 (20)	0 (0)
Higher education, n (%)	3 (60)	2 (66.6)

Primary outcome

The primary outcomes were feasibility and acceptability of the intervention. We found that the intervention was overall feasible and acceptable.

Acceptable recruitment process

The recruitment process was completed without significant complications. The inclusion rate was 80%. The researcher was present at the clinic to screen admitted patients and register those who met the inclusion criteria. The health care team (nurse and doctor) was consulted before the researcher approached the patients and invited them to participate. The patients were invited to participate the following day, which they did if they provided informed consent. Four patients per day were included in the study.

Acceptable randomisation process

The researcher managed the randomisation process. The unit of randomisation was the patient, and the randomisation sequence was computer-generated, with participants allocated 1:1. No predefined sequence or blocks were used, resulting in an imbalance in group sizes, with n = 5 in the intervention group and n = 3 in the control group.



Acceptable data collection process

The data collection process proceeded smoothly, as the participants were present in the hospital ward and available to complete the questionnaires. The questionnaires were paper-based and short, taking between 7 and 10 minutes to complete, including a brief introduction. Some participants misunderstood one of the items on the ESAS questionnaire, which is why the researcher adjusted the introduction.

Acceptable participation and response rates

Participation was acceptable, with an 80% inclusion rate among invited patients, as illustrated in **Figure 1**. Participation completion, measured by questionnaire return, reached 100% among participating patients. Both rates meet the prespecified criteria (22).

Time expenditure

In this pilot study, each inclusion took approximately 25 minutes. Patients in the hospital ward were first screened according to the inclusion and exclusion criteria. Then the eligible patients were approached individually in their rooms, with information provided about the study and informed consent obtained if they wished to participate. Performing the intervention is not considered a time burden. Collecting data took 7-10 minutes per participant.

Participants' acceptance of the intervention and completing the questionnaire

It is difficult to assess patients' acceptance of the intervention because they were partially blinded. But they seemed to respond well to the intervention, as they were satisfied with the interactions with the nurse and with nursing care in general. The intervention proved to be feasible to implement and was integrated as a relatively natural part of routine practice. Completing the questionnaires proceeded without difficulties. The researcher assisted those who needed it, e.g., those with visual impairments.

Nurse's acceptance of the intervention

The nurse's acceptance of the intervention was assessable based on written field notes. Delivering the intervention was considered acceptable and appropriate within nursing practice and was associated with a positive experience

of establishing an NPR, as reflected in the NPR evaluation (5). However, challenges emerged due to a task-oriented care culture, which occasionally conflicted with relational work. For example, prioritising interpersonal engagement was sometimes difficult alongside routine tasks such as early-morning vital sign measurements.

Acceptable balance between barriers and facilitators

Barriers and facilitators have been identified. There are minor to moderate barriers that can be overcome by making design changes at certain points for the full-scale study. Several facilitators make processes executed smoothly. Barriers include resistance to standardisation of the intervention and certain cultural and organisational circumstances that hinder the implementation of the intervention. Facilitators involve the appropriate integration of the intervention, as it is highly relevant in nursing practice and seems to optimise the NPR.

Secondary outcome

In this feasibility study, ESAS total and ESAS physiology scores were lower in the intervention group than in the control group, indicating a reduced symptom burden among participants receiving the NPR-focused intervention, although findings should be interpreted cautiously due to the small sample size.

Table 2 presents descriptive statistics for the secondary outcome, including median values and interquartile ranges (IQR) for ESAS total, physiology, psychology, and well-being scores in both study arms. ESAS scores are reported as median (Q1; Q3), where Q1 and Q3 represent the 25th and 75th percentiles, and IQR is defined as $Q3 - Q1$. The intervention arm shows lower median scores for ESAS total and physiology compared with the control arm (30 vs 40 and 25 vs 33), corresponding to median differences of 10 and 8 points, respectively. In contrast, ESAS psychology and well-being scores are similar or slightly higher in the intervention group (3 vs 2 and 5 vs 5).

Overall, these findings suggest a possible reduction in symptom burden associated with the intervention; however, results are exploratory and may be due to chance.



Table 2: Descriptive statistics for the secondary outcome

Variabel	Intervention arm. Median (Q1;Q3) IQR	Control arm. Median (Q1;Q3) IQR
Esas total*	30 (24;49.5) 25.5	40 (20;40) 20
Esas physiology*	25 (18;34) 16	33 (15;34) 19
Esas psychology*	3 (1;8.5) 7.5	2 (1;5) 4
Esas well-being*	5 (3.5;7) 3.5	5 (5;5) 0

*ESAS scores are presented as median (Q1; Q3) and interquartile range (IQR), where Q1 and Q3 represent the 25th and 75th percentiles and IQR is defined as Q3 – Q1. Notice that each score has a specific range: ESAS total 0–90, ESAS physiology 0–60, ESAS psychology 0–20 and ESAS well-being 0–10. Lower ESAS scores indicate lower symptom burden and better perceived well-being, whereas higher scores reflect more severe symptoms and greater overall distress.

The Wilcoxon rank-sum analysis was used descriptively to explore differences between groups in this small feasibility sample. P-values are not reported, as the study was under-powered and not designed to test statistical significance. For the total ESAS score and the physical symptoms score, the observed rank-sum pattern was lower than expected in the NPR intervention arm and higher than expected in the standard care arm.

In this small feasibility sample, this may indicate a potential tendency toward lower symptom burden among patients exposed to the NPR-focused intervention. For the psychological symptoms score, the observed pattern differed, with a slightly higher rank-sum than expected in the NPR intervention arm and a slightly lower ranksum than expected in the standard care arm. For the ESAS well-being score, the descriptive results did not suggest a clear difference between groups, see **Table 3**.

Discussion

Discussion of results

Primary outcome

Our findings suggest that the intervention is both feasible and acceptable in this clinical setting.

Recruitment proceeded easily as participants were approachable in the clinical setting and 80% of eligible patients were willing to participate.

Data collection needed adaptation because one item in the ESAS questionnaire could be misunderstood. Participation and response rates met predefined criteria, and time expenditure was defined and evaluated as acceptable. Among participants, there was a high level of acceptance of the intervention, as they seemed to respond well to it. Similarly, the nurse experienced a high level of acceptance of the intervention, as it seemed very appropriate for nursing care.

Minor organisational challenges were identified, but they appeared manageable and did not indicate fundamental concerns regarding the intervention. Completing the questionnaire was acceptable, through adequate introduction and assistance for those who needed it. We found an acceptable balance between barriers and facilitators supporting the viability of a future full-scale study.

Table 3: Results of the Wilcoxon rank-sum test of patient well-being

Variabel	ESAS total	ESAS physiology	ESAS psychology	ESAS well-being
Intervention arm				
Ranksum	20	21	23.5	22.5
Expected	22.5	22.5	22.5	22.5
Control arm				
Ranksum	16	15	12.5	13.5
Expected	13.5	13.5	13.5	13.5

Secondary outcome

Descriptive findings for the secondary outcome showed lower ESAS-total and ESAS-physiology scores in the NPR intervention group. However, given the very small sample size, these differences should be interpreted with considerable caution and may reflect random variation. The study was not powered to assess statistical significance on intervention effects; therefore, the findings should be regarded as exploratory and hypothesis-generating only.

The median difference in ESAS-total scores between the intervention and control group was 10 points. The minimal clinically important difference (MCID) for the ESAS-total score is defined as ≥ 3 for improvement and ≤ -4 for deterioration (25). Similarly, the median difference in ESAS-physiology scores was 8 points. The MCID for ESAS-physiology is likewise defined as ≥ 3 for improvement and ≤ -4 for deterioration.

Outcomes from other studies

Through a literature search, we found several (26–28) RCTs focusing on the impact of a person-centred approach, which are closely related to our relationship-building intervention, as person-centred care is strongly linked to the relationship between the healthcare worker and the patient. The identified studies showed significant positive outcomes across various factors, e.g., better self-efficacy (26), better symptom control, faster return to work, reduced readmissions and mortality (27), and higher levels of patient satisfaction with care (30).

In our study, the intervention did not affect the psychological components of the ESAS. A possible explanation could be the prevailing clinical culture, which tends to prioritise physical symptoms. A study from South Korea (29) found that increased empathy in the clinician-patient relationship reduced anxiety levels during bronchoscopy. On that basis, the effects of NPR components on psychological dimensions warrant further investigation.



Methodological considerations

Limitations

Feasibility criteria

The feasibility criteria were chosen, inspired by those specified by Abbott, J. (21), and the relevant criteria were selected to assess feasibility and acceptability in this study. These factors contributed to a rigorous approach to the feasibility assessment. However, the assessment is limited by the fact that the intervention was delivered by only one nurse, which may have introduced a degree of subjectivity into parts of the assessment, as these were based solely on that nurse's experience implementing the intervention.

Setting and intervention provider

This feasibility study was conducted at a single site and implemented by a single nurse, which limits the generalizability of the findings. The fact that the same nurse delivered both the intervention and standard care may lead to contamination and limit internal validity.

Randomisation

The randomisation process was conducted using an electronic allocation application with a 1:1 ratio. No predefined allocation sequence was generated, resulting in an imbalance between the groups (5 participants in the intervention group and 3 in the control group). The randomisation should have been conducted using block randomisation, which prevents unintended imbalances in group sizes.

Data collection

An additional need to explain the ESAS arose. Some of the participants misunderstood the item "appetite". They thought that a higher score equalled a better appetite, so it was necessary to explain that a higher score always indicated a worsening symptom, thus a lower appetite. Some of the participants needed assistance completing the questionnaire, either verbal or physical support. Some confusion arose because the same person facilitated the inclusion process, practised nursing, and conducted data collection.

Patients need to be clear who to approach with needs, thoughts, etc. In a full-scale study, the different roles would be distributed to several individuals to overcome this challenge.

Intervention

The intervention was feasible to perform and proceeded as a natural part of practice. Acceptance among patients occurred. Only minor challenges arose during the intervention, most notably the possibility of interruptions or other unpredictable factors that could lead to variation in its implementation. This is considered an acceptable challenge as it reflects clinical reality, and it remained possible to complete the intervention.

Furthermore, it is important to be mindful of the intervention's situational and complex nature, as it does not involve a specific action or task. It is dynamic and context-dependent, and it should vary. In empirical research, consistency and standardisation of the intervention are preferable. The only thing consistent about this intervention is the NPR-focused approach (5) and the systematically dedicated period. The complex nature of the intervention can challenge validity and reproduction of the study.

The inclusion of only one interventionist limits this study. In a full-scale study, several nurses should be trained to deliver the NPR-focused approach; however, the present study did not examine the feasibility of this aspect. Furthermore, both the delivery and acceptability of the intervention may depend heavily on the individual nurse providing it.

The nurse's communication style, relational competencies, and support for the method may all influence how the intervention is implemented and perceived. Consequently, conclusions regarding the feasibility of delivering the intervention across a diverse group of nurses are limited.

Blinding

Lack of blinding can introduce bias in a study (17). In this study, it was not feasible to blind the nurse, as she needed to be aware of the allocation status to implement the intervention.

The patients were not directly informed of their allocation status, but they may have become aware of it. A lack of blinding can introduce performance bias, as the nurse may systematically change her approach towards the two groups. A changed approach could result in the nurse compensating for the lack of initial relationship building.

Extent of intervention

The extent of the intervention influences the results. In this study, the intervention lasted at most 10 minutes. By contrast, in other identified studies(26–28), the intervention was implemented throughout the entire patient trajectory, including hospitalisation, outpatient care, and home care. An intervention of such limited extent may not be sufficient to produce significant effects on the chosen outcomes. A pre-test post-test design should be considered, with education for all nurses on performing the NPR-focused approach not only during the first encounter but throughout the entire patient admission.

ESAS

The suitability of ESAS for assessing symptom burden in this study population is questionable. Originally, ESAS was developed for use in palliative and incurable cancer patients (30), whereas this study population consisted mostly of cancer patients undergoing curative treatment. A study by Chang et al. (31) finds the ESAS instrument to be valid among a population of cancer patients not undergoing palliative care. Furthermore, patients in this gastroenterological ward experience symptoms comparable to those constituting the ESAS. For these reasons, the ESAS is considered appropriate for this context.

ESAS is a quick and easy questionnaire to complete. When interpreting results for ESAS total and ESAS physiology, these domains should be weighted more heavily than the ESAS psychology and ESAS well-being domains, since the latter are insufficiently valid (32). The questionnaire should be presented to participants with thorough instructions to prevent misunderstandings. Standardised assistance should be considered, as some participants required significant help. This could increase validity.

Strengths

Response rates were acceptable: 80% accepted the invitation to participate, and 100% of participants responded. This showed good interest and acceptability among patients (25).

The principles of the RCT design are well recognised for minimising the risk of systematic bias (18,33). In this study, several of these principles were applied, including computergenerated randomisation (17), allocation concealment, and, to some extent, blinding (17,18). These factors reduce the risk of selection and performance bias.

Data collection

Data collection proceeded smoothly, as the participants were present in the clinic and accessible to approach. Preferably, the participants should complete the questionnaire independently, but it is important to assist those who need it. The ESAS should be delivered with short instructions to prevent confusion about how to answer correctly.

Notably, there is confusion about the question on “appetite”. Appetite is considered a positive symptom in this context, and a high score may indicate a high level of appetite. But in the ESAS, high scores always indicate a greater symptom burden, so it really means a loss of appetite.

Time expenditure

As described in the results section, the recruitment process required approximately 25 minutes per participant. The intervention itself is not considered a time burden for the specific nurse. Data collection required 7-10 minutes per participant, including instructions. Additionally, it should be noted that in a full-scale study, a group of nurses would receive education in the NPR to acquire the knowledge and skills necessary to implement the intervention.

Generalisability

As stated earlier, generalisability is limited. However, the application of NPR-focused nursing practice may be broadly relevant and recommended across a wider range of clinical settings, according to the theory (5).

Conclusion

This feasibility study demonstrated that implementing the NPR-focused model described by Feo et al (5) was associated with overall feasibility and acceptability among patients who received the intervention and for the nurse performing it. Recruitment and participation rates were high; patients and the nurse responded positively to the intervention, and organisational challenges were minor and manageable. With adequate introduction and support, questionnaire completion was acceptable.

The feasibility study adhered to RCT principles, but some aspects were challenged by the intervention's complexity, e.g., the lack of blinding and the difficulty of standardising it. To conduct a full-scale study, it is relevant to consider expanding the intervention to the entire patient trajectory during hospitalisation and educating all nurses in the NPR-focused approach, using a pre-test post-test design.

The secondary outcome suggests lower symptom burden in the NPR intervention group. Still, limited statistical power precludes any conclusions concerning the impact of the NPR-focused intervention on patient well-being. Results from the secondary outcome can be used only for hypothesis generation.

Overall, the findings support proceeding with a full-scale study that includes the NPR-focused intervention as part of an expanded intervention model, while refining the design to optimise feasibility, validity, and reproducibility.

Implications for practice and further research

This feasibility study underscores the continued importance of relational work in nursing practice and suggests that nurses should strengthen competencies in building and maintaining the NPR. The nurse manager team should examine and address the prerequisites for implementing this approach in practice, including the creation of enabling conditions. Further research could involve an implementation study with a pre-test post-test design.



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Conflict of interest

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