# Application of Humanistic Nursing Care in Patients with Abdominal Aortic Aneurysm: Postprint

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## Abstract

Objective To investigate the application effect of humanistic nursing care in patients with abdominal aortic aneurysm (AAA). Methods Seventy-nine AAA patients were divided into a control group (38 cases) and a study group (41 cases) according to ward. The control group received conventional nursing care, while the study group received humanistic nursing care in addition to conventional care. Patient nursing satisfaction was evaluated using a self-designed scale, and the Self-Rating Anxiety Scale (SAS) and Self-Rating Depression Scale (SDS) were employed to assess patients' anxiety and depression status. Results The satisfaction score of the study group was significantly higher than that of the control group ($P<0.05$). After intervention, SAS and SDS scores in both groups decreased compared with pre-intervention levels, with the study group showing lower scores than the control group; these differences were statistically significant ($P<0.05$). Conclusion Humanistic nursing care, which emphasizes humanistic concern and psychological counseling, can provide a humanistic medical experience for AAA patients, alleviate their negative emotions of anxiety and depression, and plays a positive role in promoting early recovery and return to society.

## Full Text

## Application of Humanistic Care for Patients with Abdominal Aortic Aneurysm

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## Abstract

**Objective:** To investigate the application value of humanistic care for patients with abdominal aortic aneurysm (AAA). **Methods:** Patients with AAA were selected from two wards of the Vascular Surgery Department and divided into a control group (first ward) and a study group (second ward). The control group received routine nursing care, while the study group received humanistic care in addition to routine nursing. Hospitalization satisfaction was evaluated using a self-designed questionnaire, and emotional states were measured using the Self-rating Anxiety Scale (SAS) and Self-rating Depression Scale (SDS). **Results:** The satisfaction score of the study group was significantly higher than that of the control group ($P<0.05$). After intervention, SAS and SDS scores decreased in both groups, with more significant reductions observed in the study group compared to the control group ($P<0.05$). **Conclusion:** Implementation of humanistic care nursing and psychological counseling in AAA patients realizes the perfect combination of psychosomatic nursing, provides patients with satisfactory humanistic medical experiences, increases treatment compliance and effectiveness, improves quality of life, and promotes early recovery and community integration.

**Keywords:** abdominal aortic aneurysm; humanistic care; anxiety; depression; psychological counseling

## Introduction

Abdominal aortic aneurysm (AAA) is a localized or extensive dilation caused by destruction of the arterial medial layer structure, rendering the arterial wall unable to withstand hemodynamic pressure. It is not a neoplastic disease, with clinical diagnosis generally established when the abdominal aortic diameter exceeds 3.0 cm, and rupture risk increases significantly when the diameter exceeds 5.5 cm. Risk factors include advanced age, hypertension, smoking, atherosclerosis, and hyperlipidemia, among which hypertension is the most dangerous pathogenic factor. As blood pressure increases, the arterial wall becomes thinner, and the risk of rupture rises accordingly. AAA has an insidious onset and is often detected incidentally during health examinations. Once rupture occurs, it can cause hemorrhagic shock and endanger the patient's life. The disease causes severe physiological and psychological trauma, increasing psychological burden and generating mental stress. Therefore, scientific intervention targeting patients' psychological and emotional states plays an important role in improving prognosis.

Humanistic care nursing, guided by multidisciplinary knowledge, can enhance nurses' subjectivity, improve the overall quality of the nursing team, build good nurse-patient relationships, and provide patients with more comprehensive, systematic, and high-quality nursing services. This study primarily explores the application value and significance of humanistic care nursing in the treatment of AAA patients.

## Methods

### Study Design and Participants

This study enrolled AAA patients admitted to the Vascular Surgery Department of Shandong Provincial Hospital Affiliated to Shandong First Medical University. Inclusion criteria: (1) patients diagnosed with AAA through CTA examination; (2) patients with clear consciousness, normal communication ability, and no family history of mental illness. Exclusion criteria: (1) patients with surgical contraindications; (2) patients with incomplete clinical data; (3) patients unwilling to cooperate with treatment; (4) patients without family companions upon admission.

Based on ward allocation, patients from the first ward (n=30) were designated as the control group, and patients from the second ward (n=30) were designated as the study group. The control group comprised 22 males and 8 females, with a mean age of (65.2$\pm$8.5)$years and mean BMI of (24.1\pm3.2) kg/m^{\{2\}; 18 patients had a history of hypertension and 12 had athe$ 19 patients had a history of hypertension and 11 had atherosclerosis. Comparisons between the two groups regarding gender, age, BMI, hypertension history, and atherosclerosis showed no statistically significant differences (P>0.05). This study was approved by the hospital ethics committee, and all participants provided written informed consent.

### Interventions

**Routine Nursing (Control Group):** Patients received standard nursing care. Responsible nurses provided admission orientation including staff introduction, environment orientation, and relevant regulations to reduce patients' sense of unfamiliarity and fear. Patient education covered disease knowledge, guidance on bed rest, maintaining emotional stability, listening to light music, deep breathing exercises, and reading books or periodicals. Nurses ensured bowel regularity, adequate hydration (2000 mL daily), and a diet low in salt, fat, and cholesterol but high in protein, vitamins, and fiber. Antihypertensive and heart rate-reducing medications were administered as prescribed to maintain blood pressure and heart rate within normal ranges (systolic pressure 100-120 mmHg, diastolic pressure 60-80 mmHg, heart rate 60-80 beats/min). Lower extremity circulation was monitored, including skin color, temperature, and dorsalis pedis pulse. Patients were encouraged to enhance immunity, adjust clothing to avoid coughs and sneezes, quit smoking and alcohol, and actively prepare for surgery. Postoperative discharge guidance included appropriate aerobic exercise, maintaining pleasant mood, avoiding emotional excitement, developing healthy lifestyles, taking antihypertensive and lipid-lowering medications as prescribed without unauthorized dose adjustment, and regular follow-up CTA at 3 and 6 months.

**Humanistic Care Nursing (Study Group):** In addition to routine nursing, patients received humanistic care interventions as follows:

**1. Establishment of Humanistic Care Team:** Specialized training in humanistic care was conducted, with the head nurse serving as team leader, attending physicians as deputy leaders, and five senior nurses as core members. A psychological consultant served as departmental advisor. Training utilized senior nurses to mentor others, combining theory with clinical practice and emphasizing patient experience. Training formats included theoretical lectures, skill training, scenario simulation nursing rounds, and successful case sharing. Content covered humanistic care theory, with textbooks including *Caring Nursing Science*, *Narrative Nursing*, *Nursing Etiquette and Interpersonal Communication*, and *Nurse-Patient Communication Skills*. Weekly training consisted of 2 学时, and after completing 16 学时, theoretical assessment was conducted. Only those who passed theoretical assessment proceeded to practical skills training and scenario simulation exercises. Clinical participation required passing both theoretical and practical assessments.

**2. Creation of Warm Medical Environment:** The department created a comfortable working and treatment environment, designing noise-free management wards with established regulations. Reminders were posted in wards, and sound level meters were installed in corridors to display decibel values in real-time. According to national sound environmental quality standards (daytime $ $55 dB, nighttime $ $45 dB), noise sources were promptly identified and mitigation measures implemented. Smart ward construction was promoted to minimize call bell usage. Ward convenience facilities were continuously improved, including convenience boxes, microwave ovens, wheelchairs, and smart water dispensers, creating a family-style warm environment to alleviate ward-induced depression and urgency. Patient examination processes were optimized with integrated services, automated registration, appointment, and payment systems to save examination waiting time.

**3. Scientific Application of SBAR Communication Model:** The SBAR (Situation, Background, Assessment, Recommendation) communication model was applied to promote harmonious nurse-patient relationships. Nurses patiently listened to patient complaints (Situation), traced problem backgrounds, assessed current issues and psychological states, and implemented nursing measures. Throughout the communication process, nurses maintained equal status with patients, using appropriate forms of address and mutual respect. Nonverbal communication was emphasized, including smiling, affirmative eye contact, and gentle shoulder patting to provide emotional support and respond to patients' medical histories and difficulties, delivering respectful, empathetic, and vital medical care.

**4. Emphasis on Psychological Counseling and Humanistic Care:** During the COVID-19 pandemic, strict "one patient, one companion" policies were implemented. In addition to physical suffering, patients experienced various psychological reactions. Patient psychological states were promptly assessed, and multiple forms of psychological counseling were provided, including lectures, group counseling, individual consultation, relaxation training,

mindfulness-based stress reduction, and loving-kindness meditation, to enhance patients' psychological coping abilities. Negative emotions were appropriately vented through writing feelings, WeChat video/voice calls, and listening to soothing music. Nursing staff actively conducted psychological counseling to create a confident, warm, and supportive humanistic atmosphere.

### Outcome Measures

Patient satisfaction with nursing services was evaluated using a self-designed satisfaction scale (maximum score 100, with higher scores indicating greater satisfaction). Anxiety and depression were assessed using the Self-rating Anxiety Scale (SAS) and Self-rating Depression Scale (SDS), with SAS standard score cutoff at 50 and SDS cutoff at 53; higher scores indicated more severe anxiety and depression.

### Statistical Analysis

Data were analyzed using SPSS software. Measurement data were expressed as mean ± standard deviation ($\bar{x} \pm s$). Comparisons between groups were performed using t-tests. The significance level was set at $\alpha$=0.05.

## Results

### Patient Satisfaction Comparison

The satisfaction score in the study group was $(95.2\$\pm3.1)points, significantlyhigherthanthecontrolgroup's(87$ points, with statistically significant difference (P<0.05).

### Comparison of Anxiety and Depression Before and After Intervention

Before intervention, no statistically significant differences were observed in SAS and SDS scores between the two groups (P>0.05). After intervention, both groups showed decreased SAS and SDS scores, with the study group demonstrating significantly lower scores than the control group (P<0.05).

## Discussion

Conventional nursing intervention is patient-centered, providing medical care and psychological nursing. With the development of nursing science and increasing demands for healthcare services, higher-quality humanistic care nursing has emerged. The importance of humanistic care nursing in modern medicine has been widely recognized.

This study first provided healthcare staff with theoretical knowledge and skills training in humanistic care to enhance their humanistic care capabilities, which are closely related to patient treatment outcomes, psychological status, and rehabilitation effects. Second, a warm medical environment was created to

alleviate patient tension. Based on the SBAR model, active and effective nurse-patient communication was implemented. This communication model is concise and targeted, widely applied in clinical practice. Precise implementation of psychological counseling and intervention represents an important component of humanistic care, proactively providing care for patients and their families, internalizing the value theory of humanistic care in the heart and externalizing it in practice, which helps stabilize patient emotions, control blood pressure, and reduce the risk of AAA rupture.

The results showed that the study group receiving humanistic nursing intervention had higher nursing satisfaction scores and lower post-intervention SAS and SDS scores compared to the control group, with statistically significant differences ($P<0.05$). These findings demonstrate that humanistic care nursing narrows the distance between patients and healthcare staff, provides good psychological support and humanistic environment for patient recovery, shortens hospitalization time, and improves patient medical experience.

## Conclusion

Humanistic care nursing can effectively alleviate negative emotions, anxiety, and fear in AAA patients, positively contributing to blood pressure stabilization and reduced aneurysm rupture risk. Moreover, humanistic care nursing measures are more humane and yield higher patient satisfaction, warranting clinical promotion.

## Conflict of Interest Statement

The authors declare no conflict of interest in this article.

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*Note: Figure translations are in progress. See original paper for figures.*