

REVIEW ARTICLE

MASLOW'S HIERARCHY OF NEEDS IN CLINICAL SETTINGS AND IN NURSING CARE

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Abstract

Introduction: Needs assessment according to Maslow's theory is essential in clinical practice as it supports individualized care planning and patient-centered decision-making. Furthermore, it promotes a balanced therapeutic relationship between healthcare professionals and patients.

The aim of this study was to explore Maslow's theory in clinical settings and in nursing care.

Methodology: A literature search of scientific articles was conducted in the electronic databases PubMed and Scopus. The keywords used included: "needs", "patients", and "Maslow's hierarchy of needs", along with their synonyms and combinations.

Results: Maslow's hierarchy of needs is applied across intensive care, rehabilitation, chronic disease management, rehabilitation, reconstructive surgery, cardiology and hemodialysis. The model is used to support holistic, patient-centered care by prioritizing physiological and safety needs while also addressing psychological, social, and self-actualization domains. Its application has been associated with improved recovery, symptom management, functional outcomes, self-management, treatment adherence, and quality of life. Findings indicate that higher-order needs remain relevant but are often secondary to physiological stabilization mainly in acute clinical contexts.

Conclusions: The application of Maslow's hierarchy provides a structured biopsychosocial framework for understanding patients' needs and guiding individualized nursing interventions across diverse clinical settings, thereby supporting the delivery of comprehensive and person-centered care.

Key-words: Needs, patients, Maslow's hierarchy of needs

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INTRODUCTION

In recent decades, considerable attention has been directed toward addressing patients' healthcare needs. The concept of evaluating patients' needs is dynamic, evolving throughout the course of illness and shaped by contextual determinants, such as living conditions, educational level and individuals' background.¹⁻⁵

From a biopsychosocial perspective, health-related needs emerge from the interaction of biological, psychological, and social factors that shape human functioning. Healthcare needs vary not only among different population groups but also within the same individual over time when circumstances and health status change. For example, some needs are addressed through personal resources and coping strategies while others may require social support and meaningful interpersonal relationships.¹⁻⁵

In clinical settings, assessment of patients' needs facilitates the development of individualized care plans and enables healthcare professionals to identify gaps between patients' healthcare requirements and the availability of services to address them. The needs-orientated approach is strongly associated with several beneficial outcomes, including reduced levels of anxiety, enhanced collaboration between patients and healthcare providers, increased satisfaction with healthcare services, improved adaptation to chronic illness, and adherence to treatment regimens. Failure to respond to patients' needs may contribute to prolonged hospitalization, poor health outcomes, and high healthcare costs. Caregivers of hospitalized or severely ill patients experience psychological burden which underscores the need for a family-centered approach.¹⁻⁵

The identification and fulfillment of patients' needs represent a fundamental responsibility of healthcare professionals. In recent times, patients are encouraged to adopt an active role in managing their health by expressing their concerns and participating in decisions regarding their health.⁶ Healthcare professionals often adopt a predominantly biomedical model of care, which overlooks the comprehensive definition of health as a state of complete physical, mental, and social well-being. Within the Greek healthcare system, the systematic assessment of patients' needs, as well as comparative studies in this field, remain limited.^{7,8}

The aim of this review was to explore Maslow's theory in clinical settings and in nursing care.

METHODOLOGY

A literature search of scientific articles was conducted using the electronic databases Pub Med and Scopus, covering mostly the last 10 years. During the search process, the following keywords were used: needs, patients, Maslow theory,

along with their synonyms and combinations of these terms. The inclusion criteria for selecting articles for the study were as follows: the article had to be published in English, be relevant to the subject of the study, and be published in a reputable scientific journal.

LITERATURE REVIEW

Maslow's theory

Maslow's theory, presented in "A Theory of Human Motivation" (1943) provides a recognized framework for understanding human needs. Maslow proposed a hierarchical model comprising five levels of needs: physiological needs, safety and security needs, love and belongingness needs, esteem needs, and self-actualization needs. According to this model, lower-order needs must be satisfied before the higher-order needs become predominant. Physiological needs, including nutrition, hydration, rest, and the maintenance of essential bodily functions, constitute the foundation of the hierarchy and are indispensable for survival. As lower-level needs are fulfilled, attention shifts toward higher-order needs which are associated with interpersonal relationships, self-esteem, and personal growth.⁸⁻¹¹ Indeed, when individuals take more responsibility for their own life, manage to become more free, powerful, happy, and healthy.⁸ Self-actualization is a multidimensional and context-dependent process, reflected in the individuals' engagement in meaningful activities, enactment of valued social roles, and utilization of adaptive coping strategies that promote and quality of life.¹²

Contemporary theoretical perspectives, particularly within the field of mental health recovery, conceptualize human adaptation and personal development as dynamic, non-linear processes shaped by ongoing interactions between individuals and their environments, rather than as a fixed sequence of developmental stages. Furthermore, historical and cross-cultural evidence documenting individuals who attained exceptional levels of achievement, meaning, and personal fulfillment despite experiencing material deprivation has called into question the universality and cross-contextual applicability of Maslow's hierarchical model.⁹⁻¹¹

Despite its widespread application across healthcare and social science disciplines, Maslow's theory has been the subject of scholarly scrutiny and criticism. The hierarchical structuring of needs, most notably the prioritization of intermediate levels and the presumption of a sequential progression from deficiency needs to self-actualization has been criticized as subjective and insufficiently substantiated by rigorous empirical evidence.¹¹

MASLOW'S HIERARCHY OF NEEDS IN CLINICAL SETTINGS AND IN NURSING CARE

Nursing Care

As already articulated, Maslow's theory provides a valuable framework for planning and delivering patient-centered nursing care. By addressing patients' needs, nurses can prioritize interventions and improve health outcomes.¹²⁻¹⁵

The application of Maslow's hierarchy in nursing practice includes:¹⁴

Physiological needs: Ensuring adequate oxygenation, nutrition, hydration, rest, pain control, medication administration, and monitoring of vital signs to maintain essential bodily functions.

Safety needs: Promoting physical and psychological safety through fall prevention, safe medication practices, infection control, clear communication, and the provision of a stable, reassuring environment.

Love and belonging needs: Establishing therapeutic relationships, providing empathetic care, encouraging family involvement, and fostering social support to enhance patients' sense of acceptance and connectedness.

Esteem needs: Supporting autonomy, recognizing patients' achievements, providing positive reinforcement, and encouraging active participation in care to strengthen self-esteem.

Self-actualization needs: Assisting patients in identifying their meaning, pursuing personal goals, exploring spiritual concerns, and engaging in activities that promote personal growth and fulfilment despite illness.

Maslow's theory provides a holistic framework for patient care planning, emphasizing the integration of physical, psychological, and social dimensions of health. Furthermore, this theory supports the development of clinical decision-making skills by guiding the prioritization of patient needs, enhancing communication and therapeutic relationships, and fostering empathy and compassion. It also highlights the importance of patient education and empowerment, encouraging individuals to participate in their care, set realistic goals, and develop a greater sense of control over their health.¹⁴⁻¹⁶

The application of Maslow's theory to nursing care is summarized as follows:¹⁴

Meeting Physiological Needs

The basis of Maslow's hierarchy of needs is physiological needs, which are vital for the patient's survival, such as hydration oxygenation, nutrition, and sleep.

Example in Nursing Care

A nurse caring for a patient in the postoperative period should primarily ensure that he is breathing adequately, that his pain

is controlled, and that is receiving the necessary hydration and nutrition. If these needs are not met, it is impossible to address higher levels of needs, such as safety, emotional support, or self-esteem.

Meeting Safety Needs

Once physiological needs are met, then the safety needs take priority, such as preventing falls, administering medications safely, maintaining a sterile environment, and psychological safety.

Example in Nursing Care

Nurses enhance patients' feelings of safety by explaining procedures, answering questions, and providing consistent, quality care. In mental health settings, creating a nonthreatening environment and providing reassurance are key elements in meeting safety needs.

Enhancing love and belonging

The third level of Maslow's hierarchy emphasizes the importance of social interactions and emotional bonds.

Example in Nursing Care

For a patient recovering from surgery, emotional support from the nursing staff and the presence of their loved ones can positively influence the course of recovery.

Promoting self-esteem needs

The fourth level concerns the need for self-esteem, respect, and recognition. Patients who feel valued by others are more likely to actively participate in their care.

Example in Nursing Care

Nurses help stroke patients regain their self-confidence by promoting realistic rehabilitation goals and recognizing each achievement. Recognizing effort and progress, no matter how small, significantly enhances the feeling of self-esteem.

Encouraging self-actualization

As already mentioned, the highest level of Maslow's hierarchy is self-actualization, in which the individual seeks to fully utilize his or her potential.

Example in Nursing

A nurse in palliative care may support the patient in exploring their interests, spiritual needs, or personal values.

Clinical Settings

The literature review has showed that Maslow's hierarchy of needs has informed care delivery in various contexts, including intensive care, chronic diseases, stroke, hemodialysis, cardiovascular prevention, health-related behavior change, cardiology, rehabilitation, and pandemic era.

In the intensive care unit (ICU), clinical care primarily focuses on preserving life and reducing mortality by addressing

patients' physiological needs and ensuring safety. Although sedation and mechanical ventilation are often indispensable in patients with respiratory failure, their prolonged or unnecessary use is associated with adverse, long-term cognitive and psychological outcomes. Critical care guidelines emphasize strategies such as optimal pain, minimization of sedation, and early mobilization to facilitate recovery. Regarding Maslow's theory once basic physiological and safety needs are adequately addressed, then critically ill patients experience concerns related to higher-order needs, including cognitive integrity, personal dignity, emotional well-being, and interpersonal connectedness. Consequently, ICU practices that promote prompt restoration of neurological function and support patient engagement may not only enhance recovery but also create the conditions necessary for fostering a more person-centered approach.^{15,17}

Qutishat¹⁷ highlights the challenges in applying Maslow's hierarchy of needs in ICU settings. Within technologically advanced environments, patients' higher-order needs, including social support, dignity, and self-actualization, are often overshadowed by the imperative to address physiological safety. According to Jackson et al.,¹⁵ the early activation of brain and body in ICU may be conceptualized in Maslow's framework. Optimal outcomes require interventions that address both the psychological and cognitive consequences of critical illness. Karnatovskaia et al.,¹⁸ advocate for a holistic model of care, emphasizing the restoration of patients' functioning in pre-morbid state. The same researchers proposed an adaptation of Maslow's hierarchy tailored to the ICU context. At the physiological level, priority is given to those interventions that ensure survival, including nutritional support and symptom management, through evidence-based care protocols. Once these needs are addressed, the focus shifts to safety, and both physical and psychological security which includes reduction of all unnecessary sedation and facilitation of mobilization to support patients' perception of reality and reduce fear.

Beyond the ICU setting, Maslow's theory has also been applied in the care of patients with chronic illness, providing a framework for addressing the complex interplay of physical, psychological, and social needs. Individuals with chronic illness often strive to preserve independence and control over daily functioning through engagement in self-care practices.¹²

In chronic diseases, self-care and self-confidence are determinants in achieving self-actualization. Through applying self-care, patients manage to assume greater control over their health, independently of healthcare professionals. More in detail, self-care enhances autonomy, treatment adherence, quality of life, and furthermore, encompasses the cognitive, behavioral, and emotional skills required for individuals to identify and respond to their health-related needs. Self-confidence

is a determinant of self-care, as the individuals with higher confidence are more likely to participate in health-promoting behaviors and manage the consequences of chronic disease more effectively.¹² As most of the chronic diseases often do not disappear in spite of the best biomedical treatments, the real change for patients is to live the path of their development. The hidden potential for improving life really lies in helping patients to acknowledge their actual needs, and contribute to their fulfillment.⁸

In the management of chronic diseases, Abraham Maslow's (1943) hierarchy of needs has been applied to the care of patients with stroke. With population ageing, the incidence of stroke continues to rise, while therapeutic options remain limited. Following hospital discharge, patients and their families often assume primary responsibility for care, but outcomes are not always optimal. In this context, Maslow's model provides a framework for addressing patients' needs across the continuum of recovery. Wang et al.,¹⁹ compared a Maslow-based nursing intervention to standard care in 136 stroke patients. The intervention group under the hierarchy of needs demonstrated superior neurological recovery, improved activities of daily living, and greater awareness of their condition compared with controls. Feedback and coordination between nurses and rehabilitation professionals allowed the identification of functional limitations and adjustment of care plans, thus contributing to improved neurological and cognitive outcomes. Nurses had a coordinating role in the multidisciplinary team, supporting rehabilitation, monitoring nutritional risk in patients with dysphagia, and facilitating communication between patients, families, and healthcare professionals.

Maslow's hierarchy framework has also been applied to hemodialysis patients. Living under hemodialysis requires substantial adjustment to ensure survival, corresponding to the physiological level of Maslow's hierarchy. Dietary restrictions are essential to manage complications such as hyperkalaemia, hypertension, and fluid overload, while thirst is frequently reported as the most distressing symptom. Patient education on dietary and fluid management is therefore a key intervention to address physiological needs and support self-management.^{20,21} In Saudi Arabia, Bayoumi²⁰ exploring a sample of 50 maintenance hemodialysis patients indicated that self-esteem represented the most prominent need (92.0%), whereas love and belonging were the least reported (38.0%). Needs related to belonging were associated with age and duration of dialysis, with lower overall need scores observed in patients receiving dialysis for more than 24 months. Similarly, in Taiwan Shih et al.,²¹ in a sample of 159 haemodialysis patients represented provision of care as the most important need the care followed by physiological needs. Higher physical needs were reported by hemodialysis patients receiving financial support from

family whereas lower spiritual needs by those cared for by paid caregivers.

Beyond general clinical care, Maslow's hierarchy has also been adapted to highly specialized fields, including reconstructive surgery for functional and aesthetic restoration following trauma or disease. Patient needs are categorized into three levels: essential coverage needs, functional needs, and aesthetic needs. The innovation lies in the defect-focused rather than procedure-focused orientation, thus putting emphasis on the goals of reconstruction rather than the surgical technique itself. Accordingly, surgical planning is driven by outcome-oriented analysis of tissue and functional deficits, while the choice of operative technique serves a supportive role in achieving reconstructive objectives.²² As previously noted, Maslow's hierarchy posits that lower-order needs must be satisfied before higher-order needs can be addressed. In the context of reconstructive care, this principle translates into the prioritization of restoring tissue integrity and functional stability in order to prevent complications and ensure structural safety. Only after these foundational requirements have been met, then attention may shift to more complex functional outcomes and, ultimately, to the aesthetic considerations related to appearance. According to this model, optimal reconstruction is achieved when all levels of needs are addressed, aiming to replicate native tissue form and function as closely as possible, or even to enhance baseline functional and aesthetic outcomes. By focusing on defect-related needs rather than being constrained by available techniques, Maslow's hierarchy provides a framework that may offer a conceptual basis for improving the future reconstructive procedures and contributing to more satisfactory patient outcomes.²²

Behjati²³ extended Maslow's framework to cardiovascular health by proposing a needs-based model for the promotion and modification of health behaviors. The model suggests that individuals often prioritize cardiovascular health only when symptoms emerge, while sustained health behavior change requires motivational alignment across hierarchical needs. Within a needs-based approach, higher-order needs may function as determinants of behavior, although their prioritization may fluctuate over time. With increasing age, certain health-related behaviors may become entrenched, making change more difficult to achieve. In this context, limited awareness of cardiovascular health can develop into a long-standing behavioral pattern. Accordingly, cardiovascular health promotion is effective when educational interventions are implemented early in life, since behaviour modification in later stages is often challenging and less cost-effective. Two main factors influence the intensity of perceived needs in cardiovascular health: risk perception and the availability of interventions. Risk perception is shaped by prior experience and current health status, and it

determines an individual's perceived likelihood of developing cardiovascular disease. For instance, individuals who appear healthy but have a positive family history may perceive a higher health risk, which in turn influences health-related behaviors. This perception is amplified in the presence of comorbid conditions such as hyperlipidemia or diabetes mellitus. Access to interventions is influenced by environmental, functional, and economic constraints, as well as by life expectancy and pharmacological treatment. Health behaviors may be either goal-directed or intrinsically motivated, differing in their degree of alignment with perceived needs. Patients with cardiovascular disease are among the first to experience the need for necessary behavioral change. Healthcare professionals play a central role in this process and require an understanding of behavioral change through all stages. Patient engagement in a structured "cycle of change", based on self-awareness and informed decision-making, may lead to more sustainable behavioral modifications, albeit over a longer time frame. Behavioral reinforcement strategies may stabilize adaptive behaviors and enhance resistance to external disruptions. Behavioural change processes supported through reinforcement within the cycle of change, contributes to the sustained fulfilment of needs and reflect a progressive movement through Maslow's hierarchy.

COVID-19 pandemic is one more area where Maslow's theory can be applied. Hayre-Kwan et al.,²⁴ examined Maslow's hierarchy of needs in nursing practice during the COVID-19 period, highlighting the profound impact of the crisis on healthcare systems and on the professional, psychological, and social conditions of nurses. Maslow's framework was used to interpret nurses' responses, suggesting that in periods of crisis individuals may regress to lower-order needs, thus prioritizing physiological stability and safety. During the pandemic, nurses' physiological needs, including rest, nutrition, and physical endurance, were challenged by prolonged workloads, while safety needs became paramount, both in terms of physical protection through personal protective equipment and in terms of psychological and organizational support. Persistent exposure to stressors contributed to burnout syndrome, despite sustained professional commitment. Accordingly, the fulfilment of nurses' basic needs is essential for maintaining quality of care, workforce resilience, and health system sustainability.

In the field of Cardiology and particularly among hospitalized patients with coronary artery disease, the six following needs were identified: a) for support and guidance, b) for information from medical and nursing staff, c) for communication with other patients and family, d) for individualization of care and participation, e) for trust the medical and nursing staff and f) for meeting emotional and physical needs.⁸ In hospitalized patients

with acute coronary syndrome (n=454), the type of syndrome was associated with all the above-mentioned group of needs.² Furthermore, demographic variables may shape patients' needs. For example, among hospitalized patients with heart failure (n=190), those living in rural places considered the need to trust the medical and nursing staff, more significant than other patients while civil servants considered the need for being in contact with other patient groups, and ensuring communication with relatives, more important than other patients and furthermore, single patients considered the need for information from the medical and nursing staff, more significant compared to married patients. Moreover, the degree of information was associated with the need for support and guidance, for information from the medical and nursing staff, for being in contact with other patient groups, and with relatives, for individualized treatment and the need to meet the emotional and physical needs.¹ In patients with atrial fibrillation (n=215), those who reported to "be little or not at all informed" about their disease considered of a higher significance the need for support and guidance, the need to be informed and to trust the medical and nursing staff and the need for communication with other patients and family. The need for individualization and participation in care, was considered significant by patients aged >70 years and those having no children while the need for communication with other patients and family was considered more significant by women.²⁶ Regarding mental health of hospitalized patients with coronary artery disease (n=702), it was found that none of the above needs was associated with patients' anxiety. On the contrary, (a) the need for support and guidance, (b) the need for information from medical and nursing staff, (c) the need for communication with other patient groups and relatives, (d) the need for individualization of care and the patient's own participation in care, (e) the need to meet emotional needs (e.g. anxiety, fear, loneliness) and physical needs (such as rest, sleep, better hospital conditions) and (f) the need for trust in medical and nursing staff were found to be significantly associated with participants' depression levels, respectively. The multivariate linear regression showed that depression was associated with patients' needs even after controlling for patients' age, gender, marital status, place of residence, type of cardiac problem, level of awareness of their cardiac problem, and the number of years they had been suffering from the specific problem.²⁶ Needs assessment in hospitalized patients with coronary artery disease should be an integral component of their treatment, commencing at the time of diagnosis and continuing throughout hospitalization.⁷ In patients undergoing percutaneous coronary intervention, a nursing program based on Maslow's hierarchy of needs theory can effectively alleviate negative emotion, enhance self-efficacy and intervention compliance, and ensure that the patients are satisfied with the nursing work.¹⁶

Finally, the hierarchical model of burnout, adapted from Maslow's hierarchy of needs, provides a theoretical perspective for understanding the professional growth of nurses. According to this model, the fulfilment of nurses' fundamental physical and psychological needs constitutes the first level, followed by the assurance of safety and protection. The subsequent level emphasizes the need for respect from administrators, colleagues, and patients, while the next highlights the importance of meaningful interpersonal relationships and a sense of belonging. At the apex of the hierarchy lies the provision of adequate resources and sufficient time, enabling nurses to deliver high-quality patient care. Examples of strategies through which healthcare organizations can foster a healthy and resilient workforce include ensuring adequate periods of rest, providing appropriate personal protective equipment, enhancing team functioning and collaboration, implementing fair and transparent compensation systems, and facilitating sufficient interaction time with patients.^{27,28} Organizational interventions must be structured according to the hierarchical model of needs, in which priority is initially given to staff safety and physical protection and followed by psychological support, recognition, and professional empowerment. Interventions should focus on physiological needs and safety through reduced exposure to risk, strict infection-control protocols, provision of personal protective equipment, and reorganization of clinical workflows.²⁴ Therefore, organizational infrastructure should provide the essential conditions necessary to create work environments in which nurses are able not only to meet the demands of their roles but also to thrive both professionally and personally.^{27,28}

CONCLUSIONS

Maslow's theory provides a conceptual framework supporting the view that healthcare delivery should not be limited to survival alone. Comprehensive assessment and effective management of patients' needs are the fundamental components of patient-centered healthcare. Delivering high-quality care requires a holistic approach that recognizes the cognitive, emotional, social, cultural, spiritual, and environmental dimensions of human existence. As these dimensions interact dynamically and shape individuals' needs, Maslow's theory has been applied in healthcare to support needs assessment, priority setting, and the planning and delivery of nursing care.

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