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EFFECTIVE AND IMPORTANCE OF NURSING IN PRIMARY CARE SETTING; REVIEW

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Abstract:
Primary care nurses are progressively being included into the central structure of interprofessional primary care teams. In summary, the results indicate that primary care nurses have a significant influence on the provision of high-quality primary care. Furthermore, nurse-led care has the potential to supplement and improve the primary care services provided by other healthcare professionals. Nurses are capable of delivering suitable and excellent primary care services, which encompass prescription administration, patient assessment and prioritization, prevention and management of chronic diseases, treatment of sudden illnesses/conditions, educational interventions, health promotion, and management interventions. There is a need to allocate more resources towards assessing the impact of this distinct position in primary care, in order to enhance and fortify the provision of patient-centered care. The findings of this analysis can provide valuable insights for enhancing the integration and optimization of this position. They are relevant to researchers and other stakeholders involved in primary care initiatives, and can aid in future assessments and the creation of more streamlined primary care services.

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INTRODUCTION:

Nurses are assuming more significant roles in the provision of primary healthcare in developed nations. The presence of an aging population and the prevalence of chronic diseases, along with a scarcity of healthcare professionals, have necessitated the creation of health policies that emphasize the crucial role of nurses in providing primary care. The purpose of expanding primary care and community-based service delivery systems is to address both current and anticipated demands, decrease the expenses associated with hospital-based outpatient care, and eliminate unnecessary hospital visits by providing more suitable healthcare [1,2]. Considering these advancements, it is necessary to thoroughly evaluate the efficacy of primary care nurses, specifically in regards to patient health outcomes. Primary care providers serve as the initial point of contact and main source of ongoing care for patients in the healthcare system. They also organize and oversee any additional specialized care and services that patients may require [3]. Primary care is typically provided in a physical office or clinic, but there are now more options for virtual care. It is delivered by a team of healthcare professionals, which often includes family physicians working alongside registered nurses (RNs), nurse practitioners, physician assistants, social workers, dieticians, or pharmacists [4,5]. Team-based primary care, characterized by the collaborative efforts of multiple healthcare providers to achieve shared objectives with patients/caregivers, has the capacity to enhance the quality, comprehensiveness, coordination, and efficacy of healthcare services, while also increasing patient and provider satisfaction [6]. The partnership between physicians and RNs is crucial in providing primary care, since physician/RN teams have a strong ability to impact favorable results for patients, families, and the healthcare system [7].

Globally, the number of registered nurses working in primary care is increasing, although the rate of growth varies between nations [8]. Primary care nurse employment in Australia is experiencing the most rapid growth, with 63% of general practices employing a primary care nurse, of which 82% are registered nurses (RNs) [9,10]. RNs constitute approximately 70% of the primary care/community health nursing workforce in Canada [11]. RNs often possess either a college diploma or a baccalaureate degree and are capable of providing treatment for patients with intricate health requirements, which may result in uncertain health outcomes. Registered Nurses (RNs) possess a more limited range of responsibilities compared to nurse practitioners, but a broader range of responsibilities compared to licensed practical nurses (called as registered practical nurses in Ontario) [12]. Within primary care settings, Registered Nurses (RNs) serve as generalists and deliver a comprehensive array of patient services. These services encompass preventive screening, health education and promotion, chronic disease prevention and management, acute episodic treatment, and a diverse range of therapeutic interventions [13]. Job names for Registered Nurses (RNs) in primary care may differ between countries, although often used titles include 'family practice nurse', 'primary care nurse', 'general practice nurse', and 'primary health care nurse' [14]. Henceforth, the term 'primary care RN' will be employed in this study to denote this particular job. Globally, policymakers and healthcare administrators are actively seeking data to guide the integration and effective utilization of registered nurses (RNs) in primary care teams [15].

DISCUSSION:

The Nursing Role Effectiveness Model provides a structured framework for conducting research on the efficacy of nursing practices. This model was established by using the 1966 Donabedian structure-process-outcome model of quality care and doing a literature assessment on nursing-sensitive outcomes and the efficacy of nursing interventions. The structural aspect of the model comprises patient, nurse, and organizational variables that impact the responsibilities and actions of registered nurses (RNs) and the results of care [17]. The process component of nursing is solely dedicated to nursing interventions, which encompass treatments, procedures, or the nurse's duties and activities aimed at improving the patient's health state or behavior in order to achieve a desired outcome [18]. The process component delineates the activities of nurses based on three distinct categories: independent, dependent, and interdependent [18,19]. Nurses perform independent duties without supervision from physicians, which involve tasks such as assessment and monitoring (e.g., pain), prioritizing patients, promoting health, screening for risk factors, and carrying out nursing interventions. On the other hand, dependent roles refer to actions that fall within an extended nursing scope of practice and are carried out in accordance with medical directives from physicians. These activities include administering medical treatments and prescribing medications. Nurses engage in interdependent responsibilities, which involve collaborating with other healthcare team members in tasks such as communication, consultations with other providers, and coordination of care. The Nursing Role Effectiveness Model provides a framework for

understanding how nursing impacts various aspects of patient care outcomes. These outcomes include functional health outcomes (such as physical, social, cognitive, and mental functioning), self-care abilities, clinical outcomes (such as symptom control and management), prevention of adverse events (such as injuries or hospital-acquired infections), patient's knowledge and engagement (such as understanding of disease, treatments, and management), patient satisfaction, and cost. A scoping analysis was conducted to analyze literature that has employed the Nursing Role Effectiveness Model across all healthcare sectors, with the aim of assessing its suitability for application in primary care [20].

A recent systematic analysis undertaken by Norful et al. [21] analyzed global literature concerning primary care registered nurses (RNs) and provided suggestions for enhancing their involvement in team-based primary care environments. This evaluation encompassed a total of 18 research conducted in eight different countries. The primary care RN's essential responsibilities, as determined by research, include evaluating, observing, and providing ongoing care for patients with chronic illnesses [17]. Furthermore, countries including Australia, Canada, New Zealand, and the United Kingdom have established national standards or defined competences to clearly outline the distinct responsibilities of primary care registered nurses [22,23]. In general, the responsibilities and tasks of primary care registered nurses (RNs) are being more thoroughly examined and comprehended on a global scale. Nevertheless, there has been no comprehensive synthesis of the literature exploring the usefulness of registered nurses in the primary care context. Typically, studies investigating the effectiveness of registered nurses (RNs) have mainly been carried out in the acute care context, with a specific focus on staffing, job performance, and work environment. There is significant data in acute care settings that shows the RN workforce has a beneficial impact on lowering negative patient outcomes [24,25]. Additional interventions carried out by registered nurses (RNs) encompassed assistance in quitting smoking, screening for chlamydia, notifying and treating partners, educating and managing back pain, providing telephone consultations and triage services, evaluating psychological distress, conducting consultations to promote physical activity, conducting annual wellness visits, and monitoring laboratory tests [26].
The majority of primary care registered nurses (RNs) conducted the interventions autonomously, without a physician's prescription or the assistance of other healthcare professionals to address patient

requirements (n = 10) [27, 28]. Conversely, some RNs performed the intervention collaboratively, in conjunction with other healthcare providers such as physicians, health advisors, and research assistants (n = 6) [29, 30]. A further investigation analyzed the effects of different degrees of nursing engagement (minimal involvement versus extensive involvement) in general medical practices on patient obesity outcomes [31].

Out of the studies analyzed, five of them focused on a nurse-led intervention compared to the same intervention carried out by other healthcare professionals. Six studies compared nurse-led interventions to 'usual care', which is defined as the care that was provided before the intervention and did not involve a nurse in three cases, or care that had reduced or different levels of nurse involvement in three cases. Lastly, one study compared a collaborative intervention involving primary care nurses who were supported by two different types of healthcare providers (clinical pharmacy specialists and physicians). In this study, nurses independently assessed patients and referred them to either a clinical pharmacy specialist or a physician if their hypertension was not well controlled. Finally, five studies investigated the efficacy of a primary care Registered Nurse (RN) intervention through a quasi-experimental design for assessment purposes, without a comparison group [27, 29, 31, 32].

In response to this growing public health issue, the World Health Assembly of the World Health Organization (WHO) has initiated a program called Decade of Healthy Aging 2020–2030. The goal of this program is to enhance independence among older individuals by developing new care models that prioritize patients and by identifying their long-term care requirements. In the absence of intervention, it is anticipated that there would be a substantial rise in health expenditure, tax obligations, and health disparities, particularly in poor and middle-income nations, in the near future [33]. Hence, there is an increasing agreement among the general public that enhancing the robustness of domestic healthcare systems will aid in reducing the consequences of epidemiological shifts.

The COVID-19 epidemic has exacerbated the intricacy of healthcare and led to a heightened need for chronic care services provided in the patient's residence [34]. This has prompted a thorough examination of existing care models, highlighting the crucial question of the role that nurses should assume

in addressing the progressively intricate healthcare requirements of the population.

The primary objective of designing and executing the nurse's job in many nations is to enhance healthcare accessibility, particularly in situations with limited medical resources [235]. An additional reason of equal significance for the development of nursing nurses' roles is the crucial role it plays in enhancing the quality of care. This is achieved by offering assistance to chronic patients through on-site follow-up activities, which in turn reduces the number of hospital admissions and readmissions [36].

Nevertheless, the implementation of nursing duties is not exclusive to a certain country or region. Aside from the nursing skill-mix level, it is important to consider cultural, regulatory, and organizational issues that are distinct to each environment [36]. Therefore, the current changes in the spread of diseases necessitate a reevaluation of the responsibilities of different professionals in primary healthcare. This reevaluation aims to promote collaboration among professionals and also redefine the specific abilities required in nursing [37]. Specifically, the diversity of nursing environments and responsibilities on a global scale necessitates the development of novel approaches to integrating nursing duties in primary healthcare settings [38].

The WHO recommendations have established criteria to establish a sustainable primary healthcare system that aligns with the legislation, organization, and health priorities of each nation. These guidelines prioritize illness prevention and the promotion of health. The primary objective of this effort is to meet people's health requirements throughout their lives in a sustainable manner by providing effective services in prevention, promotion, treatment, rehabilitation, and palliative care [39]. Thus, it is evident that the theoretical and clinical abilities obtained by nurses through training and retraining will play a crucial role in the execution of care responsibilities and the enhancement of health results in primary care environments [40].

CONCLUSION:
Nurses are a recent addition to the primary care system in various nations and are assuming responsibilities that were formerly exclusive to the physician profession. To ensure and enhance the quality of patient care, it is necessary to develop a more thorough comprehension of the efficacy of nurses in this particular environment. There is limited data suggesting that nurses in primary care settings can deliver effective care and generate beneficial health outcomes for patients, comparable to the care provided by doctors, within the boundaries of their profession. Nurse-led care has been found to result in greater patient satisfaction compared to doctor-led care, with a more pronounced and robust impact on quality of life. There is insufficient data to suggest that nurses acting as supplements have a superior influence on patient outcomes such as death, hospitalization, or readmission compared to routine care. Nevertheless, nurses functioning as adjuncts to standard care can have a favorable and advantageous impact akin to standard care on patient satisfaction and quality of life. Despite the growing involvement of nurses in primary care, there is a lack of organized data collection to assess their actions and the outcomes they achieve for patients and the healthcare environments they operate in. Similarly, there is a requirement for a more robust empirical foundation for community nursing.

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