Nurse Management in e-Health and articulation of the principles of Primary Health Care and Supplementary Health: Experience Report during the beginning of the Covid-19 Pandemic

Gerenciamento do Enfermeiro em e-Saúde e a articulação dos princípios da Atenção Primária em Saúde e Saúde Suplementar: Relato de Experiência durante o início da Pandemia Covid-19

ABSTRACT
The purpose of this study is to report the experience of Nurses in remote care during the beginning of the Covid-19 Pandemic in Brazil, reflecting on the interconnection of Health Systems through e-Health. Talking about the theoretical frameworks of the principles of Primary Health Care, Supplementary Health, Quadruple Aim and Information Technology; themes that emerge during the Covid-19 Pandemic with the need to expand the discussion, legalization and scientific production.

DESCRIPTORS: Telemedicine; e-Health; Pandemics; Primary Health Care; Primary Nursing.

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INTRODUCTION

Historical milestones in world population health, such as pandemics, leave legacies for the development of systems, science, scientific and laboratory production and health policies; important for tackling not only similar future events or epidemic proportions, but also for reflecting on the systemic structure of each country\(^1\)\(^2\).

We are experiencing the Covid-19 pandemic, a moment in which every sphere and level of responsibility attributed or acquired, from Government, Public and Supplementary Health, Information, Technology, Science, Politics, Industry and all possible axes of a society, is seen if forced to think, reflect and act in search of ways to mitigate lives and economic consequences\(^3\).

The health system based on Primary Health Care is known and proven to be the basic strategy for the adequate articulation between the levels of assistance and the distribution of resources. Through its principles of accessibility to ensure that each individual is served in their need; longitudinality to ensure that each individual is monitored regularly; comprehensiveness to ensure continuity of care, through intersectoral intervention in levels of health care and in all other social axes; and coordination to ensure the articulation and synchronicity of meeting needs in all integral points of the assistance network\(^4\).

The discussion of supplementary health operationalized by the principles of Primary Health Care emerged from the understanding of each individual as part of the whole in equal allocation of the necessary resources, from infrastructure, health professionals to theoretical-clinical research\(^5\).

At a time like this, the discussion around health technology (e-Health) in a country that is geographically heterogeneous and socioeconomically uneven is strengthened; technological resources are able to expand and link the principles of Primary and Supplementary Health\(^6\).

In addition, it integrates the principles of innovation, which is the technological search for resolutive, qualified, practical and accessible solutions for real needs\(^7\)\(^-\)\(^9\).

The Nurse is a fundamental figure in the articulation of individual-centered care, as he works in management, assistance and health education in all stages of human development and growth, at all levels of complexity and in all types of needs\(^10\). The nurse is able to act based on the Quadruple Aim principles of health value, which are the individual’s experience, the quality of the results in population health, the reduction of costs and the experience of health professionals\(^11\).

The guiding question of this article was: How can the nurse’s management be in the telehealth scenario within the articulation between health systems in an event like a pandemic? Therefore, the objective is to report the experience of nurses in remote care during the beginning of the Covid-19 pandemic in Brazil, reflecting on the interconnection of health systems through e-Health.

METHODOLOGY

This article is an experience report of remote nurses’ visits, during the weekly time frames of the Covid-19 pandemic, according to the official pronouncements of the Ministry of Health.

The internal database was used to extract the total number of incoming calls per day via the messaging application, as authorized by the corresponding Company for use and analysis of these data.

EXPERIENCE REPORT

The work context is a startup in Health Technology, acting as a Health Integrator; clients are the Human Resources area of the contracting companies, and one of the products is a full-time healthcare team to meet the acute and chronic needs of members (employees of each company), population management and claims system supplementary health. The headquarters are in the cities of São Paulo and Uberlândia. Customers and members are in all states of the country. All employees of customers (29,809) and members are employees who adhere to the product (8,369).

The health team is made up of the Leader (a Nurse), the Personal Nurses, the Personal Analysts who are young people without training in higher education and the Personal Doctors who are General Physicians and provide care in the host cities. The work regime of Nurses and Analysts is a home office.

The calls are made via the messaging application or the telephone call in a receptive manner, when the member makes the contact, or active, when the team makes the contact. Analysts provide responsive service, schedule appointments and therapies and resolve administrative demands. Nurses manage the time between the monitoring of users with a high need to use the Supplementary Network, chronic and acute diseases, surgeries and the attendance of clinical complaints arising from the receptive, when Analysts request the transfer of messages for the evaluation and consultation of Nursing.

The survey of the isolated number of receptive messages, considering the weekly time frames of the beginning of the Covid-19 pandemic in Brazil, which are the first confirmed cases (first week), beginning of local transmission in the City of São Paulo (second week), beginning the national exponential increase (third week) and the first death (fourth week), generated the graphs below.

The first week of the graph was during the National Carnival holiday when the first case was confirmed, the messages increase after the official holiday days; the second and third weeks, which correspond to the respective periods of the beginning of the local transmission in the City of São Paulo and the exponential National increase, remained with the stabilized increase; this increase having increased in the last week with the first fatal cases and the orientation of social distance.

In addition to these, there are countless other information data that could support the discussion, but without the possibility of skillful extraction from the internal database, such as the numbers of receptive and active telephone calls, transfers from the Analyst to the Nurse, remote meetings, internal messages per application for the exchange of information between the leadership and...
the health team, e-mails for the exchange of information between Integrator and Clients and the quality of the type of subject addressed between members and Nurses.

**DISCUSSION**

This exponential increase in the volume of information exchanged between the client-Integrator, Integrator-health team, the agents of the health team itself and the health team-members aimed at structuring the flow of care for the lives and members in order to involve accessibility principles (expected increase in attendance without decreasing quality); longitudinality (preserving the fulfillment of previous needs, associating current and future needs through the establishment of a positive bond); integrality (safe and assertive guidance in relation to the use of social and assistance networks) and coordination (joining the bond of trust with the team to guide best health practices as the member uses the supplementary health system).

The Nurse assumed the role of managing the emerging secure information flows and use of the supplementary network to clients and members, and of attending to clinical complaints and doubts in relation to Covid-19, thus having to be constantly updated in secure sources on the situation of Brazil and the public and supplementary networks, experiences in other countries and the legacy of previous viral pandemics.

Strategies that guarantee quality and support our principles were thought and applied in daily volumes of interactions, covering the entire team that makes up the Integrator, from the CEO (Chief Executive Officer), partners, relationship, sales, marketing, communication, information technology, regulation, doctors and human resources focused on the emergent and urgent changes needed as a whole and in each part.

The profile of the needs of members changed drastically and suddenly, we practically no longer received administrative demands, requests to follow up on opening passwords to release procedures, requests to schedule appointments and exams and even general clinical complaints. The consultations started to be largely related to clinical complaints with flu-like and/or respiratory symptoms, doubts about how to perform distance or social isolation, when to go to the Emergency Room for symptoms or the need to perform the Covid-19 detection test.

There was an increase in lives by making the first contact; being that the members with flu and respiratory symptoms created a bond, most of the time, daily with the health team.

Some observations are relevant for future studies, such as the growth of members who have created a positive bond with the Nurse, understanding and applying home care guidelines, whether or not related to Covid-19, without going to emergency or outpatient medical care without indication the same, avoiding unnecessary displacements during the phases of containment and sustained transmission.
of the pandemic in Brazil and the overload of emergency face-to-face services.

Another observation was the increase in complaints in Mental Health due to distance and/or social isolation, including members who had previously diagnosed diagnoses and those who started a process of symptomatic anxiety clinically, due to the pandemic.

Another important observation was the difficulty of members who were undergoing follow-ups, treatments or medical investigations to continue with this line of care; added to this, members with clinical complaints unrelated to flu/respiratory symptoms needing medical consultation without being able to schedule appointments in clinics. In addition to this initial behavior of the Covid-19 pandemic being a breach of the principles of Primary Health Care, there is an increase in the risk of population contamination by exposing individuals to hospital care without the indication, and it increases the risk of worsening due to non-investigation. Adequate clinic of individuals with health needs but stable and in full working capacity.

This bond of communication and trust is discussed as one of the issues to be addressed in telehealth, agreeing that distance communication has difficulties such as not being faced with the non-verbal part of the interaction[12].

The studies that relate the Nurse and telehealth developing the monitoring, assistance, education and empowerment functions of each individual agree on improving the system as a whole, since the quality of a health team becomes accessible in the place where the individual is in a heterogeneous socioeconomic and geographically[13,14]. In addition to the Nursing decision-making and management autonomy approach as a professional working in Health Coordination[15].

The use of telehealth runs through the empowerment of each individual and may be able to reorganize health systems under monitoring[16], economic efficiency of value and experience of the individual[17-19].

CONCLUSION

Health events, such as the Covid-19 pandemic, change the way we see future or existing ways of restructuring, not only in the health system, but also in society.

It is evident that the nurse’s experience in population management to plan, receive and assist in telehealth is a fundamental part of assertive directions.

Telehealth as a means of implementing and disseminating the theoretical frameworks that support this study; the nurse’s autonomy in health coordination; the full capacity for results from telehealth; the empowerment of each individual; strategies to combat and mitigate the consequences of a pandemic; these are themes that emerge in the midst of the Covid-19 pandemic with the need to expand the discussion, legalization and scientific production that can support the change related to e-Health.