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Home Health Care Nursing in the Pandemic: Preliminary Analysis of Video Interviews

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Home Health Care Nursing in the Pandemic: Preliminary Analysis of Video Interviews

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Abstract: In the COVID-19 pandemic IKOS turned to research on home health-care nurses that had yielded a theory called the "nub of Nursing Information Behavior (NIB)." A "Core Taxonomy for Nursing Information Behavior, or CT-NIB was in June 2020. To understand the evolution of the taxonomy we turn next to video representations of interviews with active home-care nurses in the pandemic. A collection of videos was compiled and transcripts were generated. This preliminary report of the first stages of that research includes co-word analysis. The largest core regions are the community of home health care people, hospital nurs[ing] service and care taking. The core points to the front line of home health care workers taking care of COVID-positive clients. Twenty terms map to phenomena in the CT-NIB, which occur in five facets: actions, care, resources, agents and processes. Terms in the analysis that do not map are "COVID" and "COVID-positive," "mask," "PPE" and "Protective Equipment," and "front lines." We can see in the terms that do not map a sort of road map to the new territory of home health care nursing in the COVID pandemic.

Keywords: home health-care, nurses, nursing, NIB, COVID, keywords, videos

1.0 Studying Home Health Care Nursing in the Pandemic

In early 2020 as the scope of the COVID-19 pandemic became apparent, IKOS turned to research by Pajarillo (2005) to help discover the knowledge organization tools and theoretical parameters used in nursing. The work on home health-care nurses had yielded a theory called the "nub of NIB" (the nub of Nursing Information Behavior) with particular focus on home care nursing. Our team analyzed the Pajarillo text to extract a core taxonomy of NIB, which was then mapped to the professional *NANDA International Nursing Diagnoses and Classification*. The resulting "Core Taxonomy for Nursing Information Behavior, or CT-NIB, was published in IKOS' website in June (https://knoworg.org/a-core-taxonomy-of-nursing-information-behavior-ct-nib-version-1-1/). A report of this work appeared in an earlier *IKOS Bulletin* (Milonas, Zherebchevsky and Smiraglia 2020).

With an eye to understanding the evolution of the taxonomy as well as with a specific goal of not interfering with ongoing care or already exhausted care givers, our team decided to turn next to video representations of home-care nursing in the pandemic. We scanned a variety of sources and finally settled on searches that would yield news interviews with active nurses. A collection of videos was compiled, transcripts were generated, and it is the team's intention to use a variety of qualitative techniques to analyze the NIB so represented. This is a preliminary report of the first stages of that research, in which co-word analysis has been applied to help understand the ontology of the nurses interviewed.

2.0 Significance of the Research

This research has significance that is independent of either nursing or knowledge organization, as well as the interrelationship of the two disciplines with each other. Knowledge organization is the study of the development, discovery, validation, processing and classification of information into knowledge. It is the science of knowledge creation and discovery based on the conceptualization, interpretation and sense-making of data and information. For knowledge organization, this research resulted in a core taxonomy of keywords used in home health nursing from textual data used in the pandemic. This taxonomy is useful in interpreting data and information to identify clusters and proximities of themes to other concepts and disciplines. Understanding concepts and key terms in close proximity to nursing will expand the knowledge base of home health care nursing.

Nursing information behavior, as a conceptual framework in the discipline of nursing, is a set of behaviors that nurses use to identify, access, organize, process, interpret and use data and transform these into information and knowledge. These processes build on data and information that are helpful in developing an expansive body of knowledge in home health, or nursing in general.

The intertwining of the two disciplines is therefore relevant when phenomena uncovered in the text analysis of terminologies used in home health care nursing during the first quarter of the pandemic in 2020 can potentially lead to the extension of the knowledge base of nursing. With the addition of concepts and thematic clusters relative to COVID-19 and its care among home health patients, the discipline of knowledge organization can facilitate the development of knowledge in nursing. Using the nub of Nursing Information Behavior (NIB), analyzed data and information used during the pandemic can lead to the development of more knowledge in the care of COVID-19 patients in their homes. Students and practitioners of home health nursing will benefit from the increased knowledge base that can enhance the processes inherent in nursing information behavior as a tool used in safe and quality patient care.

2.0 A Video Method

Three members of the team agreed to carry out online searches for relevant video content. They used slightly different approaches as a form of methodological triangulation. These were:

Milonas: The terms "home care," "nursing" and "covid" were typed in the search box of the Google search engine. When the results were returned, the "More" option was selected from the Google menu bar found at the top of the search result page. From the drop-down menu of the "More" option, the "Videos" option was chosen. The videos presented in the search result page were analyzed and those pertaining to the topic of home care nursing during the COVID crisis were selected. The date range for video inclusion was mid-March to late May. In addition, videos related to nursing homes or to nurses in nursing homes were excluded from the analysis.

Zherebchevsky: Selecting YouTube as a data source was an obvious choice. First, a high representativeness of YouTube materials was of great importance, because the abundance of relevant videos allowed obtaining contextually rich description of home care nurses' community. Second, every video was timestamped and carried some data-specific metadata elements. To retrieve the most relevant content, it was essential to use a small number of relevant keywords or keyword phrases. To this end, two phrases "home care nurses" and "YouTube video" were combined into a single sequence query expression—"home care nurses YouTube video." Using the Google search engine, this query generated 112,000,000 results. A small subset of videos was selected using two criteria: 1) the final selection had to include narratives describing more than one aspect of home care nursing activities (i.e., COVID-19, pediatric care, and geriatrics care) and 2) be accompanied by a transcript. In the end, not all selected videos met the second criterion.

Pajarillo: Used Google and the category for Video; search terms used were "COVID and "visiting nurses." There were many search results that were manually evaluated to determine relevance.

The three lists were compiled. After duplicates were removed the collection included 45 videos. Team members were then asked to generate (or download) transcripts of each video. Approximately half of the videos were found on YouTube; many of these were accompanied by transcripts. The remainder of the videos were found on the websites of various news agencies and nursing organizations. When transcripts were not available, the voice transcription function of Google Docs was used.

3.0 Co-word Analysis: The Front Line

The 45 transcripts were entered into the QDataMiner module of the Provalis ProSuite (https://provalisresearch.com/products/prosuite-text-analytics-tools/). The WordStat module was then used to analyze the content looking first at keywords and then at phrases.

The transcripts contain 33,033 keywords of which 2,367 are unique. There are 212 keywords that occur with a frequency of 10 or higher. Keywords with a frequency of

occurrence of greater than 28 (representing at least 0.8% of the total vocabulary) were compiled and the list was cleaned to remove non-words (e.g., "www"). Multi-dimensional scaling (MDS) was performed to analyze the co-occurrence of these keywords. A dendrogram showed 10 regions (Figure 1).

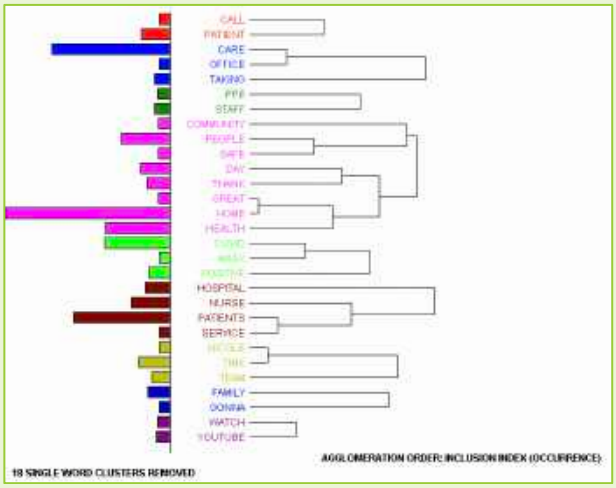

Figure 1. Dendrogram of most frequently occurring keywords.

A three-dimensional plot was then generated (Figure 2) showing the relative proximity of keywords within clusters as well as of the clusters.

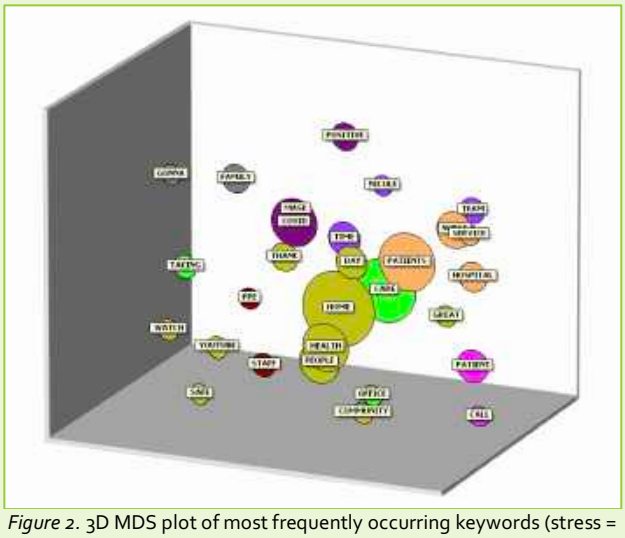

Figure 2. 3D MDS plot of most frequently occurring keywords (stress = .251 R^2 = 0.6456).

The goodness of fit is low suggesting the model fits the data only partially. Most likely this is due to the large number of keywords in the deleted long tail. As Figure 1 indicates, 18 single word clusters were removed; removing more would have increased goodness of fit but at the expense of the visibility of the keywords shown. We see that the largest core regions occurring in the center are the community of home health care people (notice the location of "thank" and "great" in this region),a second region constituting hospital nurs[ing] service, and care taking. Orbiting the core are regions representing patient calls, staff PPE, family and YouTube.

WordStat also allows analysis of phrases of any number of words; these "terms" including two to five words were compiled. There are 11,191 such phrases of which 375 occur 3 times or more. Using those occurring 10 times a dendrogram showing three reions was created (Figure 3).

Figure 3. Dendrogram of most frequently occurring phrases.

Figure 4 has a 3D MDS plot.

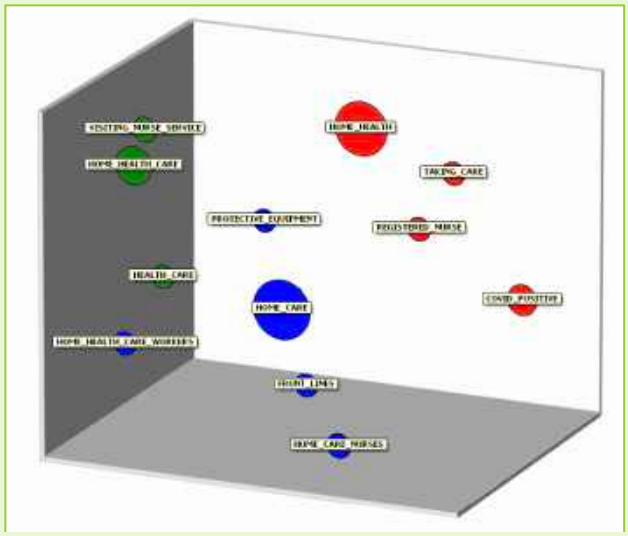

Figure 4. 3D MDS plot of most frequently occurring phrases (stress = .1723 R^2 = .9351).

This plot fits the data very well suggesting it is an accurate model of the top tier of content. The core region points to the front line of home health care workers, a proximate second region points to registered nurses taking care of COVID-positive clients. The third region points to the role of visiting nurse services.

4.0 Mapping to CT-NIB

Terms occurring in this analysis were mapped to the CT-NIB taxonomy. The terms that mapped are shown in Table 1.

Phenomena	Facets	Subfacets
care nurses	agents	staff
discovery	care	information
health care	resources	domain
home care	care	patient care
home care experience	actions	behavior
home care nurses	agents	staff
home care nursing	resources	domain
home visits	care	patient care
information conduits	agents	influencers
information searching	processes	processes
information sources	resources	resource
information tools	resources	tool
nursing care	care	patient care
patient care	care	patient care
patient interaction	actions	interaction
patient logs	care	information
perception of personal and family	actions	behavior
personal and family	agents	patient
professional nursing	resources	domain
sense	actions	behavior
treatment	care	treatment

Table 1. Terms mapped from CT-NIB.

Twenty terms map to phenomena in the CT-NIB, which occur in five facets: actions, care, resources, agents and processes. An interesting observation is the presence of information searching in the combined phrases "family gonna watch YouTube." Terms in the analysis that do not map are, not surprisingly, "COVID" and "COVID-positive," "mask," "PPE" and "Protective Equipment," and "front lines."

5.0 Toward Open-Coding

It is important to remember that this report is a mid-project preliminary report, which is to say, the actual open-coding of the transcripts has yet to occur. On the other hand, we can see already the rich core of home health-care nursing that maps directly to the CT-NIB. We also can see in the terms that do not map a sort of road map to the new territory of home health care nursing in the COVID pandemic. These observations will help us to frame the ongoing detailed analysis of the transcripts. We expect to add COVID-related terminology as an annex to the CT-NIB, as well as to learn more about the KO activities of the front-line home health-care nurses working in the pandemic.

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THE POWER TO NAME AND THE CLASSIFICATION IN THE DOMAIN OF GAY MEN AND THE ALTERNATIVE MODALITIES OF SEXUALITY IN BRAZIL

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Abstract:. Sexuality and the social construction of sex are established as disciplinary and biopolitical devices that are necessary political techniques for the government of the masses. Entering the domain of sexualities as a device allows us to understand them as a field where disciplinary power and biopolitics are intertwined in a strategy of control that is simultaneously individualizing and massifying. In this study, we aimed to understand the self-naming practices in relationship/dating applications in order to outline a classification of the domain of gay men, alternative modalities of sexuality, and desire in Brazil. A preliminary study for the Brazilian scenario was conducted in the form of a cartography, constructed as affections are manifested. The research corpus was cartographed using Scruff and using the software Voyant Tools. In the virtual world, subjects create a spectrum, a performance that is anchored in desire. Secrecy still seems to be a strategy for many people to live their desire. Subjects who seek to relativize their sexual practices using deviant terms are guided by the social construction of a coherence between sex, gender and conduct/desire/affection that produces overlaps according to the logic of the subject in their negotiation with society. Whether out of fear, shame or prejudice, a man who sexually desires another man does not always identify himself as "gay., In their self-classification, some subjects use terms that cause deviations of meaning, distancing themselves from a gay identity and reinforcing their masculinity according to stereotypes and prejudices.

Keywords: subjects, identity, social, desire, classification