Governance and Medical Education: A Look through Conceptual Networks

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Abstract:

Background: The accreditation of medical education in Mexico dates from 1996. Since then, the self-assessment instrument has been revised 4 times. The version approved in 2018 is used to dictate international accreditations, hence the importance of analyzing the structure of the instrument. In this context, the study was carried out with the purpose of analyzing the "institutional organization and government" as a category of quality evaluation in the accreditation process carried out in Mexico by the Mexican Council for the Accreditation of Medical Education.

Materials and Methods: The research was qualitative and the principles of Gadamerian hermeneutics were applied in 4 stages to perform the qualitative content analysis of 36 quality indicators. The information obtained was analyzed with the Redes2005 software.

Results: 33 keywords, 230 relationships between keywords, 8 categories and 21 thematic networks were identified. The categories and networks "Mission", "Curriculum", "Teacher" and "Government structure" constitute the central nucleus of the institutional organization and government.

Conclusion: The agglomeration pattern of thematic networks structures the "institutional organization and government" in a pattern represented by the motor nucleus-marginal nucleus bisector.

Key Word: Institutional organization;Quality management; Accreditation, COMAEM.

I. Introduction

Global trends such as the knowledge society; the increase in poverty, multidimensional inequality, violence, the educational gap; as well as the promotion of hope that education will contribute to overcoming the miseries of the world, have led to the accreditation of educational programs that are taught at the higher education level, being expressed as a global public policy on the way to the year 2030[1-4].Medical schools, with a legitimate aspiration to contribute to the development of the construction of a healthier world through the training of doctors who have the sensitivity to meet the health needs of the population [5], have gradually been incorporated into the accreditation processes. of their educational programs [6] following the recommendations of the World Health Organization [7], the World Medical Association [8] and the World Federation for Medical Education (WFME) [9].

In this context, medical schools have faced different challenges associated with the implementation of actions that lead to the preparation of the self-assessment report and the criteria, standards, and indicators established by the different accrediting agencies; which reflects the regional variability in comparison with the guidelines established at the international level by the WFME [10].

From the perspective that the post-COVID era is imposing, international, regional, national and local differences are accentuating [11], and in the field of accreditation processes, it is generating the need to adopt mechanisms that help to implement accreditation processes. "e-accreditation"; This trend implies two areas of opportunity that medical schools are facing. One is associated with overcoming the barriers to comply with accreditation standards, among which are: leadership within medical schools, the institutional governance structure, the organizational culture of the educational institution, in addition to the model of curriculum management [12]; that is, the implementation of actions that lead to obtaining accreditation recognition is related to the governance of the medical school [13].Another area is linked to the management of the process that allows the integration of the self-assessment report, which includes the narrative that is built to explain compliance with the criteria, standards, and indicators to evaluate the educational program; which implies the work of reading, interpreting, understanding and analyzing the reference frameworks where the guidelines, criteria, standards and indicators established by the accrediting agency are expressed, in addition to recovering and integrating the documentary evidence associated with each indicator. Thus, the scope of governance of the medical school associated with the management of the accreditation-oriented activities that are carried out, are linked to a

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hermeneutic process where interest groups generate contextual, cultural and semantic frameworks from which they interact to carry out the actions required to obtain accreditation.

Following this last line of reflection, the question arises: what are the concepts that underlie the statements of the medical education accreditation standards? When reflecting on this question, it is verified that, in the field of governance, in addition to overcoming the possible barriers that arise, there are accreditation standards associated with this item in the evaluation for the accreditation of the educational program that must be analyzed. Delimiting the questioning, the following question is stated: how to enable the hermeneutic circle of interpretation-understanding-application in the self-assessment team? Approaching from an epistemic approach, it is understood that the self-assessment team is also part of the governance structures of the medical school, that is, it is subject at the same time as object in the epistemic relationship that is built to write and document the evidence. of the institutional self-assessment. This reflects the depth of the problem of the hermeneutical situation in which the members of the self-assessment team are immersed.

An example to clarify this point is the 2018 Self-Assessment Instrument (SAI2018) [14] used by the Mexican Council for the Accreditation of Medical Education (COMAEM) in quality assessment processes. Rillo et al [15] analyzed the consistency of the SAI2018, identifying that the chapter related to "institutional organization and government" (governance) is the starting point for self-assessment, establishing direct relationships with 5 chapters and indirect relationships with one. From this perspective, the processes oriented towards educational management closely linked to the institutional organization and government structures of medical schools acquire relevance, which in addition to being substantive elements in the evaluation of educational quality, represent the viability to operate the institutional policies when implementing plans to improve educational processes and increasing the level of educational quality, as well as ensuring and guaranteeing that they meet the minimum quality evaluation criteria [16]. Thus, a path is shown to initially understand the epistemic relationship established by the field of action of governance in medical schools with the understanding of the quality standards and indicators that interest groups are building; so that leads to the following question: what are the latent thematic networks in the chapter of "institutional organization and government" of the SAI2018 used to accredit the educational programs of medical schools by COMAEM?

Thus, a path is shown to initially understand the epistemic relationship established by the field of action of governance in medical schools with the understanding of the quality standards and indicators that interest groups are building; so that leads to the following question: what are the latent thematic networks in the chapter of "institutional organization and government" of the SAI2018 used to accredit the educational programs of medical schools by COMAEM? The relevance of the chapter on "institutional organization and government" is part of the global trend in the governance of educational institutions as well as the impact on the accreditation processes of educational programs [17], which is why the study was carried out with the purpose of identifying the latent thematic networks in the chapter of "institutional organization and government" of the SAI2018 used by the COMAEM in the evaluation process of educational programs of medical schools.

II. Material And Methods
A qualitative, interpretative, inductive and documentary study was carried out, from the hermeneutical approach based on the principles of Gadamerian hermeneutics [18]. Hermeneutics allowed content analysis to determine the underlying meaning of the standards in Section 1 "Institutional Organization and Government" of SAII2018 [14], which is used by COMAEM to carry out the accreditation process of medical education in Mexico.

Study design
The study was carried out in 4 stages:
* Stage 1: characterization of the accreditation of medical education as a hermeneutic situation.
* Stage 2: recovery of the accreditation tradition of medical education in Mexico.
* Stage 3: content analysis of chapter 1 "institutional organization and government" of the SAI2018 [14]. It was developed in two phases:
    o Analytical phase: definition of analysis units, categorization criteria and coding rules.
    o Comprehensive phase: identification of keywords and their categorization.
* Stage 4: Construction of semantic networks. It was developed in two phases:
    o Reconstructive phase: identification of relationships between keywords and preparation of strategic diagrams for each thematic network identified.
    o Critical phase: analysis of the structure of thematic networks through a strategic diagram.

Obtaining the information
In stage 1, the hermeneutic situation was characterized, understood as the relationship between the subject who interprets the text and the hermeneutic horizon of understanding from which it was possible to

understand and elaborate the meaning of the "institutional organization and government" as a category of evaluation of the quality of medical education [19,20]. For its development, documentary research was used from the praxic field of the philosophical research method [21] and the qualitative metasynthesis approach [22].

In stage 2, the tradition of accreditation in Mexico was recovered by characterizing the point of view, the direction of the gaze and the horizon of the gaze, which translates into exposing the actual historical awareness of the hermeneutic situation of the subject in its context. history determined by previous experience, prejudices and the limitations of its understanding [18]; which contributed to problematize the "institutional organization and government" from the approach of educational quality assurance. The following steps of the qualitative content analysis technique [23] were also developed: determination of the study objectives, construction of the study hypotheses, identification of the material under study.

In the analytical phase of stage 3, the universe of work was defined and the content units of the SAI2018 were chosen, distinguishing: sampling unit, registration unit, context unit and generic unit. The sampling units were integrated with the statement of the 36 indicators of chapter 1 "institutional organization and government" of the SAI2018. The registration units were the words contained in the statement of the indicators of each standard. The context units were the interpretive framework to understand the meaning and relationships of the registration units [24], and corresponded to the statements of the standards. The generic units corresponded to the name assigned in the SAI2018 to each standard.

To code the registration units, the following coding rules were applied: transform plurals into singular forms, replace conjugated verbs by their non-conjugated infinitive form, eliminate *stop-words*: which allowed obtaining the keywords and continue coding [25]. A keyword expressed one or several words of similar semantic content. Technically, in this phase the statements of the 36 indicators were mined by preparing a list of the words present in the statement of each indicator. Subsequently, an occurrence matrix was created with all the mined words [26]. Next, the frequency of the keywords was analyzed, creating a *word cloud* with the free access online generator developed by Zygomatic [27]. The categorization was done inductively. In the comprehensive phase of stage 3, the registration units were categorized using the *bottom-up* methodology to integrate them according to the emergence of the keywords.

In the reconstructive phase of stage 4, the relationships between keywords were identified, for which the frequency of occurrence and co-occurrence of the keywords was calculated using an adjacency matrix built with the Redes2005 software [28].This is a free software developed by the University of Granada to build networks from keywords and allowed to calculate the equivalence index of the relationships identified between the keywords [29]. Subsequently, strategic diagrams represented as networks or graphs that graphically show the grouping patterns of keywords in thematic networks were prepared [30]. The thematic network is made up of keywords that function as a node, and edges that represent the relationship between associated words. These diagrams were built based on two criteria: centrality and density. Centrality expressed the closeness between two or more keywords of the thematic network and the external cohesion index of the thematic nodes that make up the network was calculated [31]. The density refers to the internal cohesion index and represents the degree of development achieved by the thematic grouping and is determined by identifying the number of internal associations of the keywords that comprise it [31].

In the critical phase of stage 4, the representation of the thematic networks was carried out jointly through the construction of a strategic diagram, relating the dimensions of centrality and density, which enables each thematic network to be distributed in one of the following quadrants[30]:

- Quadrant 1: is the region located above and to the left of the diagram, characterized by grouping thematic networks with high density but low centrality. This implies that highly developed thematic networks are located, but not very central. These thematic networks can be considered as highly specialized, representative of a high level of activity, but isolated within the analysis of the institutional organization and government.
- Quadrant 2: is the region located above and to the right of the diagram, characterized by the fact that density and centrality represent high values. Thematic networks in this region are characterized by being highly developed, central and integrated. Their location places them as the nucleus that moves and gives meaning to the institutional organization and government.
- Quadrant 3: is the region located below and to the right of the diagram, characterized by grouping thematic networks with low density and high centrality. This implies that well-related thematic networks are located, but with little development. They are considered emerging networks that are later incorporated into the core of the network, so they can also be considered as bridge networks.
- Quadrant 4: is the region located below and to the left of the diagram, where centrality and density are low. The networks located here have a weak character, are poorly developed, and constitute the peripheral and marginal limits of the structure. In this quadrant the themes usually appear for the first time and also in many cases they end up here by disappearing definitively; although they can become emerging thematic networks.

Finally, the type of structure of the thematic network of chapter 1 "institutional organization and government" was analyzed based on the graphic organization of the networks in the strategic diagram prepared [30]. The analysis of this diagram was based on the typology of Callon et al [32] and 3 types were defined [30]:

• Type 1: the thematic networks are distributed in quadrants 1 and 4; It implies that the organization of the networks is carried out around a nucleus of well-related and developed topics, although they are in contact with a set of less-developed and peripheral topics.

• Type 2: thematic networks are distributed in quadrants 2 and 3; it represents that the networks are in the process of integration, since it contains specialized topics that allow different networks to be linked; Therefore, they are considered bridging or emerging issues.

• Type 3: the distribution of the thematic networks is homogeneous in the four quadrants of the strategic diagram. It is observed when the networks are well structured, complex and include both central and peripheral networks. The structure represents a good dynamic between the different thematic networks.

Statistical analysis

The processing and statistical analysis of the information was carried out through the calculation of the frequency of occurrence and co-occurrence of the keywords, elaboration of adjacency matrices, calculation of equivalence indices of the relationships between words, calculation of the cohesion index. internal, external cohesion index, centrality and density.

Ethical considerations

Due to the use of techniques and methods of analysis typical of documentary research, the study was classified as a risk-free investigation. The analyzed document is freely accessible.

III. Result

The SAI2018 is structured in 7 chapters that integrate the standards and indicators to evaluate the quality in the following areas: institutional organization and government, study plan, teachers, students, evaluation, institutional linkage, and administration and resources. The "institutional organization and government" corresponds to chapter 1 and groups 36 indicators.

Figure 1. Cloud that visually shows the relative importance of the 54 keywords identified in the 36 indicators to assess the institutional organization and governance of the SAI2018.
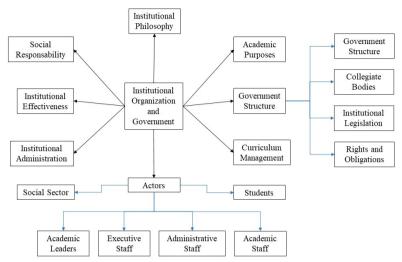
Keyword identification

The 36 indicators included a total of 661 words; of these, 135 (20.42%) were identified as "words with semantic meaning" and 79.58% (526 words) were valued as "*stop words*" and were eliminated from the subsequent analysis. Among the words that were eliminated there were nouns, verbs, adjectives and adverbs, which lacked semantic content for the study.

When carrying out the frequency analysis of the 135 "words with semantic meaning" they were grouped into 54 keywords; the highest frequency obtained was 6.67% and corresponded to the word: "government structure"; followed by the word "mission" with 5.93%. Figure 1 shows the keyword cloud, displaying the relative importance of both keywords expressed by the size and color of each word.

The category "actors" of the educational process represents 28.15% of the total keywords and was structured with the following subcategories: student, academic staff, administrative staff, managerial staff,

academic leaders, and social sector. In this category it is important to deepen the conceptual analysis of the sense of understanding between the following terms: academic authorities, academic leaders, key actors.

The category "curricular management" includes aspects such as the curricular model, curricular design, curriculum implementation, study plan, educational process, general practitioner and comprehensive development; and represents 9.63% of keywords.

Figure 2. Schematic representation of categories and subcategories of the 54 keywords identified in the 36 indicators to assess the "institutional organization and governance" of the SAI2018.

The "administration" category includes 5 (3.71%) keywords related to the administrative organization, administrative function, administrative experience, and resources assigned to the operation of the academic program. While the category "institutional effectiveness", understood as the evaluation that allows assessing "how well the institution fulfills its mission or educational purpose and how productively it is achieving its goals" [33] groups 5.93% of the keywords and includes the following: governance, learning outcomes, academic environment, and quality assurance.
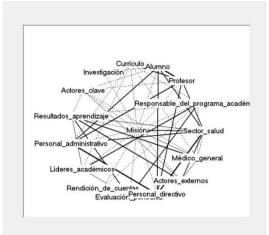
In the "social responsibility" category, 9.63% of the total keywords are found and include the following: "periodic evaluation", "transparency", "responsibility", "decision-making", "needs for attention to health", "health needs", "global health" and "accountability".
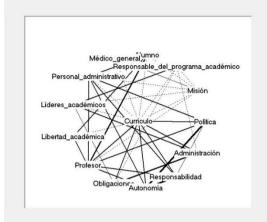
Network building
The analysis of the co-occurrence matrix built to identify the existing relationships between the 54 keywords through the equivalence index, allowed us to identify 33 keywords that established more than one relationship with another word and 21 keywords without relationships (these were excluded from subsequent analyses). In total, 230 relationships were quantified. The keywords "governance structure", "teacher", "mission" and "curriculum", obtained the highest number of relationships and represented 36% of all registered relationships.
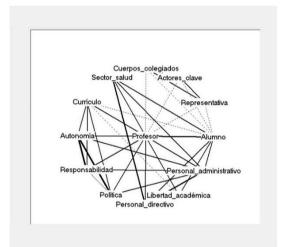
By grouping the keywords in semantic networks based on the relationships with other words using the Redes2005 software, and representing them by means of graphs, 21 thematic networks were identified that are named according to the most representative keyword of the grouping. The thematic networks with the highest number of relationships and keywords were: "Mission", "Curriculum", "Teacher" and "Governance Structure". They were also the networks with the greatest centrality and development in the set of 21 networks identified (figures 3 and 4).
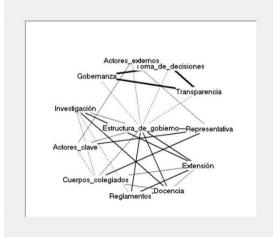
The thematic network "Mission" was the grouping that presented the highest number of closely related keywords (18 words), both internally and externally. In the network shown on the left of figure 3, the continuous lines show the internal relationships established by the keyword "mission" and other words grouped in the network, with the rest of the keywords that provide structure to the network. In the same way it happens with the external relations that are represented by dashed lines.

Figure 3. Schematic representation of the thematic networks "Mission" and "Curriculum" obtained with the Redes2005 software. Solid lines represent internal relationships and dashed lines external relationships.

Figure 4. Schematic representation of the thematic networks "Teacher" and "Government Structure" obtained with the Redes2005 software. Solid lines represent internal relationships and dashed lines external relationships.

The "Curriculum" thematic network grouped 14 internally and externally related keywords. In the network shown to the right of figure 3, the external relationships established by the words curriculum and mission are observed; what is interpreted as a codependency between the components of curricular management and the achievement of the mission.
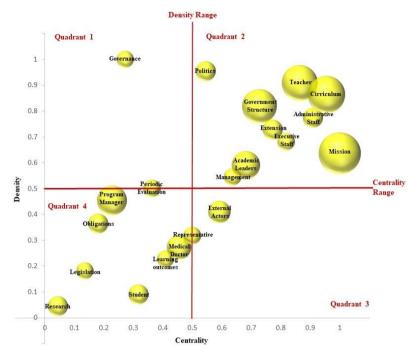
Figure 4 presents the thematic networks "Teacher" and "Government Structure". The first network grouped 13 internally and externally related keywords. In this network it is important to highlight the internal relationships of the keyword "teacher" with "curriculum", "autonomy", "responsibility" and "academic freedom", as they represent central axes in the educational process that, in addition to guaranteeing the formation of quality of the medical student, will be the engine for the achievement of the mission and the learning results.In the "Government Structure" network that is presented on the right of Figure 4, it can be seen that it is structured by two keyword nuclei, the "government structure" nucleus and the "governance" nucleus; both groups establish external relations.

Network structure

By integrating the 21 thematic networks identified in a strategic diagram (figure 5) relating the range of centrality and the range of density, they were distributed in four quadrants. The position they acquire in the graphic distribution contributes to the formation of a structure pattern that outlines the role they play in the entire chapter 1 of the SAI2018.

Figure 5 shows that the quadrants with the highest density of networks are quadrants 2 and 4, and those with the least density, 1 and 3. In quadrant 1 the thematic network "Governance" is located, made up of 3

keywords ("governance", "decision-making" and "transparency"), establishes 3 internal relationships and has no external relationships. This characteristic outlines the network as a structure with relationships that incorporate the conceptualization of equity, social justice, social inclusion and sustainability, among the keywords that it groups (governance/transparency, governance/decision-making and decision-making/transparency), but isolated from the rest of the components that make up chapter 1 of the SAI2018.

Figure 5. Graphic representation of the thematic networks identified to evaluate the organization and institutional governance.

In quadrant 2 the following thematic networks are located: "Mission", "Curriculum", "Teacher", "Administrative personnel", "Governance structure", "Extension", "Management personnel", "Academic leaders", "Administration" and "Policy"; Due to their location, they are characterized by being integrated with internally and externally related keywords, which is why they present a high level of development and integration, constitute the core of chapter 1 of the SAI2018 and give meaning to the structure of the institutional organization and government.

In quadrant 3 the thematic network "External Actors" is located, defined by its position as an emerging network characterized by its high integration, but it is underdeveloped due to the number of relationships between the keywords it groups. In quadrant 4 the following thematic networks are located: "Periodic evaluation", "Research", "Responsible for the academic program", "Student", "Learning results", "General practitioner", "Representative", "Legislation", and "Obligations"; These are networks that are not very related, and have little development, which is why they are considered to be marginal networks that may at some point become emerging networks or disappear permanently.

Comprehensively analyzing the distribution of the thematic networks represented in figure 5, the structure of chapter 1 "institutional organization and government" of the SAI2018, is classified as a type 1 structure, that is, the networks are distributed in quadrants 2 and 4, which implies that it is organized in well-related and developed thematic networks linked to less-developed and peripheral thematic groupings.

IV. Discussion

Education, as a Sustainable Development Goal, is linked to quality processes, helping to guarantee the right to education to reduce inequalities. Thus, quality is linked as a multidimensional scenario from which equality and social justice are promoted. In the case of medical education, quality is promoted as the tool that guarantees the development of student training, contributes to reducing regional inequalities in terms of access and incorporation into the labor market, and as the mechanism by which it operates. accountability to society by making its processes transparent through accreditation.

The accreditation of educational programs to train physicians is a worldwide sociocultural phenomenon with a specific impact on medical schools. For the development of the accreditation process, the foundation is the self-assessment instrument because it establishes criteria, standards, and indicators to assess the quality of

medical education developed by higher education institutions [34]. Among the standards used at the international level are those related to the administrative structure and governance [9,35], which are reflected in chapter 1 "institutional organization and government" of the SAI2018 used in the accreditation process by COMAEM. In this sense, the historical evolution of the accreditation of medical education in Mexico shows the relativity of the conception of quality, whether through processes aimed at guaranteeing quality or, aimed at quality assurance or improvement. keep going; one way or the other, lead to the accreditation process.

The content analysis carried out recovers the latent meanings that underlie chapter 1 of the SAI2018 through 54 keywords and shows the importance of the keywords "governance structure", "mission", "professor", "in charge of the program academic", "curriculum" and "student" as concepts that define the administrative structure, institutional organization and government, reported by other authors who have explored accreditation patterns at the international level [34].

The analysis of the hierarchical relationships between the keywords identified 8 categories that show the complexity for decision-making in the development of academic programs and clearly exposes the relevance of the participation of interested parties (stakeholders) in medical training through from the category "actors of the educational process", with 6 subcategories; and in the category "government structure", with 4 subcategories, the ways to address the logistical problems of medical education derived from power groups and the prevailing organizational culture are summarized. These results are consistent with what is reported in the literature [36], and with the categories indicated by COPAES [37] to assess the actors of the educational process, the processes and results of the academic program oriented to the development of the substantive and adjective functions of the institution. educational.

On the other hand, the study identified 230 relationships between 33 keywords that made it possible to integrate 21 thematic networks, among which "Mission", "Curriculum", "Teacher" and "Governance Structure" stand out, due to the number of words key that they grouped, the centrality and the development that they presented; which allows us to argue that the thematic network "Mission" expresses in a substantive way the institutional philosophy in the process of training general practitioners and specifies the international trends in accreditation aimed at evaluating the achievement of the mission [10,38].In addition, the thematic network "Governance Structure" makes it possible to ensure an organizational structure for the implementation of the medical curriculum and the development of the educational process in the training of medical students. Thus, the curriculum and the professors are shown as elements that stand out in the organization and government of medical schools, recognizing that there is a wide diversity of curricular models, however, the government structure, as well as the professors, will determine the facilities or obstacles for its implementation and ensure the quality of the educational process [39]. These results are consistent with what has been reported in the literature in two ways. The first is related to attention to the barriers faced by medical schools to develop and document the evidence requested in the SAI2018 [12]; the second, with the integration of the main actors in an organizational structure that makes it possible to strengthen curricular management and focus on achieving the mission of the educational program [11].

The thematic networks are concentrated in quadrants 2 and 4 of the strategic diagram that integrates them (figure 5). This implies that networks such as "Mission", "Governance Structure" and "Curriculum" located in quadrant 2, are shown as the nuclei that energize and give meaning to the rest of the networks, in addition to being the conceptual structures that represent congruence. of chapter 1 of SAI2018. On the other hand, the networks located in quadrant 4 represent the thematic nuclei that are in the process of consolidation ("Program Manager" network, "General Physician" network) and are appearing for the first time ("Learning results" network, "Students", network "Research"), or, they have a tendency to disappear (network "Legislation", network "Obligations"). It stands out that the thematic networks "Periodic evaluation" and "Representative" are on the limits with other quadrants, which implies the possibility of migrating when reviewing the relevance in the integration of the self-assessment of the medical educational program. In this context, the joint vision of the thematic networks suggests that chapter 1 of the SAI2018 is oriented towards the assessment and articulation of the substantive and adjective functions of the medical school, being consistent with what was reported by Rillo et al [15].

The study carried out provides, methodologically, the use of qualitative content analysis integrated into the construction of strategic diagrams to facilitate the analysis based on numerical criteria, the understanding of the structure of the SAI2018 as well as the assessment, review and development of new standards. ; and thematically, it provides elements of understanding when specifying the standards and indicators when carrying out the self-assessment; so that it is possible to delve into the relationships that will be established between the thematic networks that go beyond the quality model used by COMAEM, and the possible hierarchical relationships that enable quality dynamics within medical schools.

Among the limitations of the study are those attributed to qualitative and interpretive studies, which highlights the possibility that another research group could identify keywords, categories and thematic networks different from those reported in this study.

V. Conclusion

The results obtained show that section 1 of the SAI-2018 is structured around 3 thematic networks: mission, governance structure, and curriculum, drawing attention to the relevance of deepening the relationships that will be established between these words that go further. beyond the quality model used by COMAEM, and the possible hierarchical relationships that enable quality dynamics within medical schools.

The first approach that was made in the study to analyze the hierarchical relationships between the keywords, was the identification of 8 categories obtained through the analysis of qualitative content, showing a structure that is brief, objective and controls the bias of the derived subjective interpretation. from the experience of the teams of academic staff that participate in the construction of the institutional self-assessment.

The thematic networks obtained in the study corroborate the structure of section 1 of the SAI2018 around the mission, government structure and curriculum, constituting an approximation to obtain metric properties that make it possible to show that the indicators, as well as the standards to evaluate the institutional organization and government, constitute common standards to the educational programs of the 158 medical schools that exist in Mexico. Additionally, the elaborated strategic diagrams allow organizing the set of keywords based on numerical criteria to elaborate the grouping in thematic networks based on the observable co-occurrence of the basic and clearly identifiable keywords.

In conclusion, the agglomeration pattern presented by the thematic networks concentrated in quadrants 2 and 4 makes it possible to identify conceptual regularities that underlie the keywords, giving as a hermeneutic consequence the typological characterization of the motor core-marginal core bisector. Thus, the co-occurrence relationships between the keywords related to section 1 "institutional organization and government" of the SAI2018 used by COMAEM, configure a network that facilitates analysis and graphic representation, so that it is possible to understand the strategic categories and subcategories. and important to achieve the development of the educational program and, consequently, its accreditation. Finally, the results obtained during the development of the study allow us to consider that the use of qualitative content analysis, integrated into the construction of strategic diagrams, is a tool that facilitates the understanding of the SAI2018 structure.

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