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Essay

From Agreements to Consensus

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In the light of the diversity and complexity of medical knowledge and considering the lack of sufficient evidence for health-related decision-making, medical professionals usually seek agreements. Though it may seem an apparently simple task, the idea is to understand that this is a high-level process. Assuming consensus is a rigorous multidisciplinary research methodology that, in addition to overcoming any conceptual gaps, systematically generates new knowledge via formal rounds of consultation. This article is intended to set forth a position with regards to the rigorous approach followed for health related consensus. A popular methodology is discussed – Delphi – identifying its advantages and steps followed, including its modifications and uses according to the researchers' needs and resources, keeping in mind the importance of considering the final result expressed in the recommendations in terms of its fundamental impact on health related issues.

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De los acuerdos a los consensos

A B S T R A C T

Frente a la diversidad y la complejidad del conocimiento médico o con ocasión de no contar con suficiente evidencia para la toma de decisiones en salud, entre los profesionales del área se estila buscar acuerdos. Aunque se trata de una tarea aparentemente sencilla, se propone entender este proceso como de un nivel superior, asumiendo el consenso como una metodología de investigación multidisciplinaria rigurosa que permite sistemáticamente, además de superar los vacíos conceptuales, generar eventualmente nuevo conocimiento mediante rondas formales. El objetivo de este artículo es plantear una posición frente al rigor con que se realizan los consensos en el campo de la salud. Se presenta una metodología ampliamente utilizada para buscar consensos, el Delphi, identificando sus ventajas y los pasos a seguir. También se describen sus modificaciones y usos según las necesidades y los recursos de los investigadores, poniendo de presente la importancia de considerar el resultado final, manifiesto en las recomendaciones, como de impacto clave en los problemas de salud.

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The current development of science and technology makes the task of determining and/or identifying the starting and ending points of the actions of subjects with regards to the way knowledge is approached versus a particular phenomenon a relatively complex endeavor. A case in point is the occurrence of conceptual disagreement about who should be the professional that administers sedation to a dentistry patient and under what conditions. This has led to recommendations established in guidelines aimed at preventing morbidity or mortality outcomes.¹ This is not a minor issue considering that health sciences are not exact and it is quite often that opinion on the matter differs. Hence the need to have points of reference that contribute study elements, in addition to ensure the patient and the professional that tasks are being undertaken in a responsible manner and will be performed according to stringent protocols and following universally accepted principles. The purpose of this article is to present a position regarding the rigorous approach for developing health related consensus.

"Agreements" or "consensus" are usually considered synonyms when in fact they are not; "agreement" comes from the verb "to agree" and according to the definition of the Real Academia de la Lengua Española, agreement is a "Resolution adopted by the courts, societies, communities or collegiate bodies" or a "premeditated resolution of one or several people" or "Convention between two or more parties".² "Consensus" on the other hand refers to an "agreement which is the result of consent among all the members of a group or among several groups".² One could also consider one of the eleven constructs established by the US National Institutes of Health such as the expression MeSH (Medical Subject Heading) to define the development of "consensus conferences" as scenarios to present summarized statements that represent the agreement of a majority of physicians, scientists and other professionals summoned with the aim of reaching a consensus – usually with conclusions and recommendations – on a topic of concern. The Conference attended by participants that represent the scientific and legal opinions, is an important vehicle to assess the current medical thinking and reflects the latest advances in research in the corresponding area of interest.³ From this perspective one could then infer that reaching agreements and arriving at a consensus belong to two different levels and past of the difference is due, on the one hand to rigorous examination of events, and on the other, to the impact resulting from the expected results. Consequently, to convene a consensus entails a highly demanding methodology.

Evidently, social sciences have made an interesting contribution to this field of study with the development of the Delphi technique, a methodology used to make forecasts and predictions and was developed by the Rand Corporation at the beginning of the "cold war", with a view to analyze the impact of technology over warfare, and was later complemented by Linstone et al, as described by Scott.⁴ It is a technique within the realm of exploratory research that, in addition to contributing to the consensus, builds upon and even generates knowledge based on the knowledge of the participants in the team of experts.

The methodology was designed to reach a consensus based on the discussion among experts, via an iterative process

in which a questionnaire is sent to the participants in order to identify their "position" about certain topics and upon receiving the information the investigator analyzes the written comments and uses them as feedback to the experts for the next round of questions, during which the experts reassess their views on the basis of such feedback information. The goal is then to build a consensus that statistically speaking means to "reduce the inter-quartile space, specifying the mean".⁵ A second objective accomplished is to gradually filter out any irrelevant information to the process.

Some of the formal requirements of this method include the anonymity of the participants, repetitiveness and feedback, in addition to a statistical analysis of the group's answers. Anonymity, both with regards to the administration of the questionnaires and feedback has been key to this methodology since that gives every expert equal opportunity to position their ideas and avoids the presence of "leaders" that may be a deterrent or exert pressure which could somehow bias the results. The method is also useful to "prevent influences from the authority-holders in the organization".⁶ There are still differences in the number of iterations or how many times the answers are forwarded to the experts, since Powell⁷ suggests three rounds, while Garavia & Gredler (mentioned above) suggest four, under the premise that the participants may make changes in their positions as a result of the information from their peers discussion so as to try to accomplish the "mean" so desired.

The process requires that the context, the time frame for the analysis of the issue and the selection of the panel of experts together with their acceptance to participate, be all previously established. A broad diversity in the make-up of the group is key to minimize the selection bias since the idea is not to meet with the scholars, but encourage a broad and unrestrained debate. Some researchers have defined the expert as "a person that can make valid contributions on account of his/her knowledge based on practical and current experiences", as described by Kennedy.⁸ The "ideal" number of participants has been broadly debated, since that depends on a broad range of characteristics, such as the subject matter considered, the available resources, etc. However, Okoli et al⁹ recommend between 10 and 18, a number that seems reasonable. Others⁷ feel that the minimum should be seven experts and each additional one reduces the error; however, it has been accepted that over thirty experts do not provide for important contributions but rather raise the cost of the research and increase the job burden.

Once the group of experts is established, the process goes on to explain the method with a view to obtaining reliable information from each and everyone of the participants. Please note that the method is designed not to convince those who think differently, but the iterative rounds system enables the joint development of an increasingly higher quality consensus.

Consequently, it may be inferred that reaching a consensus is an investigative process that requires a rigorous methodology. In the realm of health, seeking consensus has become an extended practice,^{6,10,12} because as already mentioned, understanding the reality is very complex while there are as well certain topics of interest for which conclusive

information is not available. Referring to the complexity of the task, health care “systems” demand the active participation of all the stakeholders. In most of the Western world, States are structured not as representative democracies, but as participative democracies that enable the communities to contribute and build according to their interests and needs, and thus consensus participation is a frequently used tool to manage health care services. Moreover, if such services are conceived as a network, networks themselves call for expeditious mechanisms that enable decision-making. The decisions are increasingly structured as a result of community participation instead of a central level hierarchy; the next step is agreements (or imposition derived from the agreement among just a few) and then finally consensus.

With regards to the other factor, i.e., the lack of conclusive evidence, consensus has become an opportunity to reduce the spectrum of differential actions and to strengthen the alliance between evidence and experience. The current guidelines for medical care currently implemented around the world have a methodological background in their recommendations which is supported by broad participation to set up developer groups (theme experts) that in addition to legitimizing the process, helps to identify the best evidence for building knowledge.

Such experiences are a good example of the application of what is understood by “consensus”. Although the Delphi method described is broadly known, it is not always faithfully applied, either because changes have been introduced or because different objectives are pursued (for example, the real time Delphi — a consensus achieved in the course of a meeting or conference; political Delphi — in which a group of experts presents all possible options in the light of a problem; hierarchical Delphi — to prioritize problems or solutions).

Consensus conferences are increasingly being used by scientific societies to settle disagreements and (probably unintentionally) are lowering uncertainty so that health care service users will enjoy prevention, diagnosis, care and rehabilitation, an opportunity expressed as improved quality of life. This is one additional reason to suggest that when the goal is solving conflicts, the strategies to approach those conflicts should go beyond the aspiration of “getting an agreement” but rather seeking “consensus”, always using a rigorous process from the conceptual to the methodological.

That is when an excellent opportunity arises to use consensus for debugging information, building on the basis of differences and analyze events in a more structured way with a comprehensive approach rather than unilaterally or with a single look approach. Of the recommendations of the paper presented by Ibarra et al,¹ special mention should be made of the interest to protect the users of sedation from potential complications, the thorough description of the procedures to

consider, as well as the leading role of the Colombian society of Anesthesiology and Resuscitation (SCARE) in including diverse groups of experts and scientific societies in the deliberations. The suggestion is that for forthcoming opportunities, the information about the set-up methodology and the number of rounds needed to build consensus be expanded, so as to enable other groups to replicate the consensus experience in future.

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Conflict of interests

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REFERENCES

1. Ibarra P, Galindo M, Molano A, et al. Recomendaciones para la sedación y la analgesia por médicos no anestesiólogos y odontólogos de pacientes mayores de 12 años. *Rev Colomb Anestesiol.* 2012;40:67-74.
2. Diccionario de la Lengua Española. 22.a ed. Madrid: Real Academia Española; 2001 [cited Mar 7 2012]. Available from: <http://www.rae.es/rae.html>
3. US National Library of Medicine, National Institutes of Health [cited Mar 7 2012]. Available from: <http://ncbi.nlm.nih.gov/pubmed/>
4. Scott G. Strategic Planning for High-Tech Product Development. *Technology Analysis & Strategic Management.* 2001;13:343-64.
5. Dalkey N, Brown B, Cochran S. The Delphi Method, III: Use of self rating to improve group estimates. *Technological Forecasting and Social Change.* 1970;1:283-91.
6. Garavalia L, Gredler M. Teaching evaluation through Modeling: Using the Delphi technique to assess problems in academia programs. *Am J Eval.* 2004;25:375-80.
7. Powell C. The Delphi technique: myths and realities. *Journal of Advanced Nursing.* 2003;41:376-82.
8. Kennedy H. Enhancing Delphi research: methods and results. *Journal of Advanced Nursing.* 2004;42:504-11.
9. Okoli C, Pawlowski A. The Delphi method as a research tool: an example, design considerations and applications. *Information & Management.* 2004;42:15-29.
10. Meyrick J. The Delphi method and health research. *Health Education.* 2003;103:7-16.
11. Cook C, Brismée JM, Fleming R, Sizer P. Identifiers suggestive of clinical cervical spine instability: A Delphi study of physical therapists. *Physical Therapy.* 2005;85:895-906.
12. Duque G, Close J, Jager J, Ebeling P. Treatment for osteoporosis in Australian residential aged care facilities: consensus recommendations for fracture prevention. *MJA* 2010;193:173-9.