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Editorial

Quality indicators: A tool to improve efficiency

Indicadores de calidad: una herramienta para mejorar la eficiencia

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Fifty years have passed since Donabedian,[1] in a rigorous way, set out the theoretical bases of a process as complex as the evaluation of the quality in the medical attention. The main objective was the achievement of 'expected improvements in health status attributable to care'[2] and systematized the evaluation in the triad structure–process–result. In addition, in his research on health systems, he defined the methodology for achieving information, sampling and selection, measurement patterns, . . . Years later, Donabedian[3] made a new contribution by pointing out the seven attributes that define quality: efficacy, efficiency, effectiveness, optimization, acceptability, legitimacy, and equity. All this facilitated a systematic measurement and evaluation of many aspects and practices of health care.

Since the diagnosis of human immunodeficiency virus (HIV) infection, more than 30 years ago,[4] the natural history of infection has undergone an important epidemiological, diagnostic, therapeutic and preventive transformation, to the point of becoming a chronic infection.[5] Like all chronic processes, the care of these patients is complex and requires the use of a great amount of socio-health resources, and therefore it seems necessary to justify their use, with the greatest scientific evidence available. This is a challenge that we must face.

The concern of professionals about the evaluation of the medical care of the HIV-infected patients in our country, and the possibility of improvement in relevant aspects, led at the end of 2010 to the publication by GESIDA of the first quality care indicators for the care of persons infected by HIV/AIDS.[6] Sixty-six indicators were defined and were focused on patients rather than in the disease, and were: objective, measurable, relevant, not imperative, and based on the scientific evidence available at that time.[7] These indicators measured relevant aspects of health practice, usually recommended in clinical practice guidelines. Thus, these indicators would allow us not only to effectively monitor the quality of our daily clinical practice, but also to identify the potential areas for improvement. An additional advantage is the possibility of comparing each center, anonymously, with others of similar characteristics, evaluating their long-term impact and taking into account the impact of the measures adopted.[8]

According to HIV-infected patients, some documents taking into account the follow-up had been developed, often focusing on administrative, preventive or accessibility aspects, and retention in the health system. In New York, the Department of Health developed and updated several quality standards, focused on clinical care for HIV-infected patients, with a centralized organization that analyzes and determines priorities.[9] In 2015, in a detailed review of the literature in order to identify the main quality indicators in care for HIV-infected patients, Johnston et al.[10] identified 558 possible indicators. Only 43 of these ones were repeated in at least 3 studies, being the most employed: the continued attention to the patients, the prophylaxis against *Pneumocystis jiroveci*, the CD4 lymphocyte count, the serology for syphilis, and the request for HIV viral load.[10] All this highlighted the heterogeneity in the definition of quality indicators. A year later, in a detailed work done by Korthuis et al.,[11] the authors described the importance of the implementation of four quality indicators in the prognosis of HIV-infected patients: therapeutic (initiation of antiretroviral therapy, prophylaxis against opportunistic infections), screening (hyperlipidemia, hepatitis C), monitoring patients (CD4 cell count, HIV clinic visits), and prevention (vaccination against influenza virus or pneumococcus). The obviously reached conclusion was that patients receiving a better service in their care have a lower mortality rate.

In this Journal, Delgado-Mejía et al.[12] have carried out a pioneering work in the field of HIV infection in our country. The authors have evaluated which quality indicators are associated with a higher mortality and/or risk of hospital admission, concluding that these indicators are mainly referred to diagnostic delay, regular follow-up in consultation, prevention of infections, and control of comorbidities. In a previous study, referenced by the authors, and conducted in Canada, it is showed that global mortality was correlated with an index composed of several indicators about antiretroviral treatment and its monitoring.[13] The study of Delgado-Mejía et al.[12] included a more global view of care and also correlated with the possibility of hospital admission. Undoubtedly, this work contributes to detect areas for improvement. Although the information provided has a great potential

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value and the association is observed with firm outcome events, such as hospital admission or mortality, not subject at all to subjective variability, we must be cautious in its interpretation since other factors, besides studied ones could have influenced, and the benefit of each of the measures involved is not linear. On the other hand, the retrospective nature of the study establishes a very interesting hypothesis but it is convenient to work prospectively with it in the clinical practice of the numerous cohorts existing in our country. It is also important to bear in mind that the measurement of indicators should always be accompanied by a reflection on the timing of the indicators and the circumstances in which they have taken place and the sometimes-limited possibilities of modifying the results.

The work carried out by GeSIDA on indicators of quality of care is in addition to other already carried out by other scientific societies in our country.[14,15] It is desirable to generalize its use, as an instrument of internal, external and improvement evaluation, by all the agents involved in the health care: administration, health care professionals and patients. Welcome to the culture of responsibility that is being applied to our daily care with objective data.

References

1. Donabedian A. Evaluating the quality of medical care. Milbank Mem Fund Q. 1966;44 Suppl. 3:166–206.
2. Donabedian A, Wheeler JR, Wyszewianski L. Quality, cost, and health: an integrative model. Med Care. 1982;20:975–92.
3. Donabedian A. The seven pillars of quality. Arch Pathol Lab Med. 1990;114:1115–8.
4. Centers for Disease Control. Pneumocystis pneumonia – Los Angeles. Morb Mortal Wkly Rep. 1981;30:250–2.
5. Deeks SG, Lewin SR, Havlir DV. The end of AIDS: HIV infection as a chronic disease. Lancet. 2013;382:1525–33.
6. von Wichmann MA, Locutura J, Blanco JR, Riera M, Suarez-Lozano I, Saura RM, et al. GESIDA quality care indicators for the care of persons infected by HIV/AIDS. Enferm Infecc Microbiol Clin. 2010;28 Suppl. 5:6–88.
7. McGlynn EA. Selecting common measures of quality and system performance. Med Care. 2003;41 Suppl.:I39–47.
8. Indicadores de calidad asistencial de GeSIDA para la atención de personas infectadas por el VIH/sida. Available in: http://www.gesida-seimc.org/indicadoresdecalidad.php?mn_MP=452 [accessed 13.10.16].
9. HIV Clinical Resource. Available in: http://www.hivguidelines.org/quality-of-care/nys-hiv-quality-of-care-program/indicators/ [accessed 04.11.16].
10. Johnston S, Kendall C, Hogel M, McLaren M, Liddy C. Measures of quality of care for people with HIV: a scoping review of performance indicators for primary care. PLOS ONE. 2015;10:e0136757.
11. Korthuis PT, McGinnis KA, Kraemer KL, Gordon AJ, Skanderson M, Justice AC, et al. Quality of HIV care and mortality rates in HIV-infected patients. Clin Infect Dis. 2016;62:233–9.
12. Delgado-Mejia E, Frontera-Juan G, Murillas-Angoiti J, Campins-Roselló AA, Gil-Alonso L, Peñaranda-Vera M, et al. GeSIDA quality care indicators associated with mortality and hospital admission for the care of persons infected by HIV/AIDS. Enferm Infecc Microbiol Clin. 2017;35:67–75.
13. Lima VD, Le A, Nosyk B, Barrios R, Yip B, Hogg RS, et al. Development and validation of a composite programmatic assessment tool for HIV therapy. PLoS ONE. 2012;7:e47859.
14. Martin MC, Cabre L, Ruiz J, Blanch L, Blanco J, Castillo F, et al. Indicators of quality in the critical patient. Med Intensiva. 2008;32:23–32.
15. Felices-Abad F, Latour-Perez J, Fuset-Cabanes MP, Ruano-Marco M, Cuñat-de la Hoz J, Del Nogal-Sáez F. Quality indicators in the acute coronary syndrome for the analysis of the pre- and in-hospital care process. Med Intensiva. 2010;34:397–417.