

Revisiones sistemáticas y metaanálisis: valoraciones de calidad de vida, utilidad en salud

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Revisiones sistemáticas

Una revisión sistemática emplea métodos sólidos para reducir el riesgo en los procesos de recopilación, resumen, presentación, interpretación e informe de las pruebas de la investigación. Las características claves de una revisión son las siguientes:

- objetivos claramente establecidos;
- criterios de elegibilidad predefinidos;
- metodología explícita y reproducible;
- búsqueda sistemática de la literatura;
- evaluación de la validez de los estudios incluidos;
- síntesis y presentación sistemáticas de los resultados.

Revisiones NO sistemáticas

Las revisiones no sistemáticas suelen ser productos creados por expertos para proporcionar una visión global o resumen amplio sobre lo que ocurre en un campo concreto. La naturaleza de las revisiones no sistemáticas implica que sean susceptibles al sesgo. Los autores podrían no expresar claramente la metodología utilizada y podrían ser selectivos a la hora de presentar la evidencia para apoyar un punto de vista concreto preexistente.

Metaanálisis

Ambos tipos de revisión pueden incluir metanálisis, siempre que sea factible y adecuado. Un metanálisis es un método estadístico que resume los resultados de más de un estudio. Los metanálisis de revisiones no sistemáticas pueden basarse en una selección incompleta de estudios.

Si no se aplican ningún metanálisis, los resultados de varios estudios se describen en el texto de la revisión en forma de síntesis narrativa.

Calidad de vida? QoL

Definición de calidad de vida relacionada con la salud (CVRS)

Importancia de medir la CVRS en el ámbito sanitario

QoL -> OMS (1994)

“La calidad de vida es la percepción del individuo sobre su posición en la vida dentro del contexto cultural y el sistema de valores en el que vive y con respecto a sus metas, expectativas, normas y preocupaciones.”

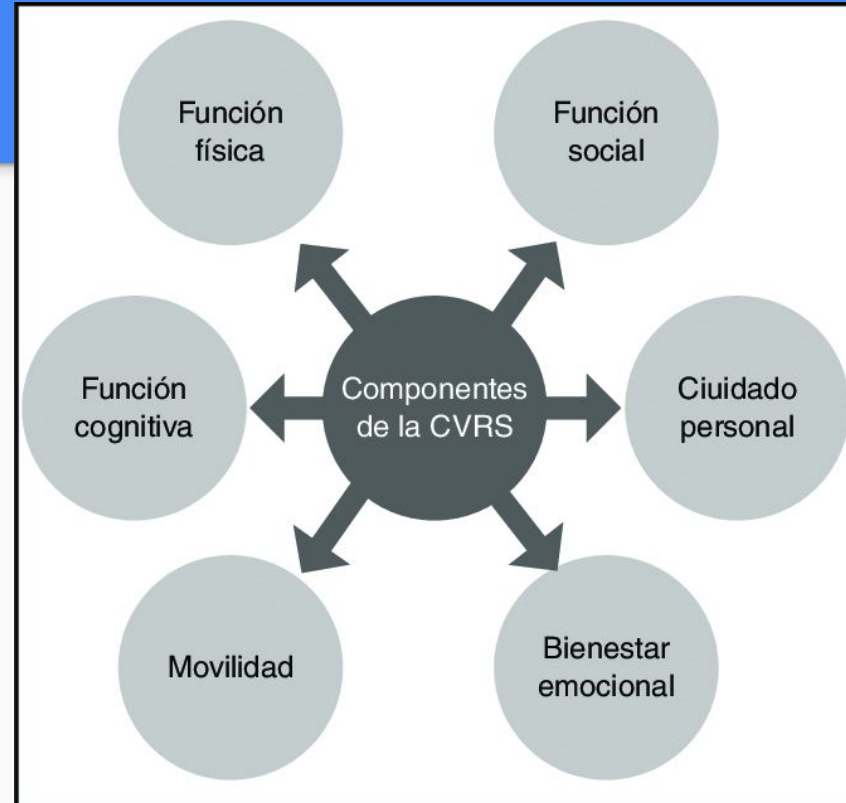
Tabla 1. Propuestas de definiciones en Calidad de vida relacionada con la salud

| Autor (es) | Definición |
|--|---|
| Echteld, van Elderen, van der Kamp ¹⁰ | Resultado cognitivo y afectivo del afrontamiento a estresores y disturbios percibidos contra los objetivos de la vida, tales como la enfermedad específica y elementos generales; experimentar satisfacción con la vida y afectos positivos y la ausencia de efectos negativos |
| Awad ¹¹ | Percepción del sujeto de los resultados de la interacción entre la severidad de los síntomas psicóticos, efectos colaterales de la medicación y nivel de desarrollo psicosocial |
| Burke ⁶ | Evaluación subjetiva del paciente de los dominios de su vida que son percibidos como importantes durante un tiempo particular |
| Schipper ¹² | Efectos funcionales de una enfermedad y sus consecuencia en la terapia |
| Schipper, Clinch & Powell ¹³ | Efectos funcionales de una enfermedad y su terapia sobre un paciente, percibido por el mismo paciente |
| Bowling ¹⁴ | Efectos físicos, mentales y sociales de la enfermedad en la vida diaria y el impacto de estos efectos en los niveles de bienestar subjetivo, satisfacción y autoestima |
| Shumaker & Naughton ¹⁵ | Evaluación subjetiva de la influencia del estado de salud actual, el cuidado de la salud y las actividades promotoras de la salud, en la habilidad para alcanzar y mantener un nivel de funcionamiento general que permita seguir las metas valoradas de vida y que esto se refleje en su bienestar general |
| Patrick & Erickson ¹⁶ | Valor otorgado a la duración de la vida y su modificación por impedimentos, estado funcional, percepción y oportunidades sociales que son influenciadas por la enfermedad, daño, tratamiento o las políticas |
| Wu ¹⁷ | Aspectos de la salud que pueden ser directamente vivenciados y reportados por los pacientes |
| O`Boyle ¹⁸ | Expresión de un modelo conceptual que intenta representar la perspectiva del paciente en términos cuantificables, la cual depende de su experiencia pasada, su estilo de vida presente, sus esperanzas y ambiciones para el futuro |

CVRS

Concepto multidimensional que incluye aspectos físicos, psicológicos y sociales

Percepción subjetiva del bienestar y satisfacción personal



CVRS ¿para qué?

- evaluar la progresión de la enfermedad
- evaluar el grado de respuesta al tratamiento
- apoyo en la toma de decisiones clínicas
- mejora la relación médico-paciente



Instrumentos de medición

- Cuestionarios genéricos y específicos
- Escalas objetivas y subjetivas



REVIEW

Open Access

Quality of life assessment instruments for adults: a systematic review of population-based studies



Nila Patrícia Freire Pequeno^{1,2*}, Natália Louise de Araújo Cabral¹, Dirce Maria Marchioni³, Severina Carla Vieira Cunha Lima² and Clélia de Oliveira Lyra²

Abstract

Background: Against a backdrop of population aging and improving survival rates for chronic noncommunicable diseases (CNCD), researchers are placing growing emphasis on health-related quality of life (HRQoL). The aim of this study was to identify the QoL assessment instruments used in population-based studies with adults conducted around the world.

Methods: A systematic review of original research published in all languages between 2008 and 2018 was conducted. Systematic reviews and meta-analyses were excluded.

Results: Sixty-three articles (38.1% conducted in the Americas) fitted the eligibility criteria. Based on the AHRQ checklist for cross-sectional studies and the Newcastle-Ottawa scale for cohort studies, methodological quality was shown to be fair in the majority of studies (55.6%) and good in 44.4%. The country with the highest number of publications was Brazil (20.6%). Twelve types of generic instruments and 11 specific instruments were identified. The generic instrument SF-36 was the most frequently used measure (33.3% of studies). In-home interviewing was exclusively used by 47.6% of the studies, while 39 studies (61.9%) reported the use of self-administered questionnaires. Over two-thirds of the studies (34.9%) used questionnaires to investigate the association between chronic diseases and/or associated factors.

Conclusions: It was concluded that the wide range of instruments and modes of questionnaire administration used by the studies may hinder comparisons between population groups with the same characteristics or needs. There is a lack of research on QoL and the factors affecting productive capacity. Studies of QoL in older persons should focus not only on the effects of disease and treatment, but also on the determinants of active aging and actions designed to promote it. Further research is recommended to determine which QoL instruments are best suited for population-based studies.

Keywords: Quality of life, Health-related quality of life, Population surveys, Systematic review

Table 2 Generic quality of life assessment instruments used in population-based surveys 2008–2018

| Abbreviated QoL Instrument | References |
|----------------------------|--|
| AQoL-4D | [70] |
| CASP-16 | [43] |
| EQ-5D | [12, 20, 25, 26, 32, 35, 38–41, 51, 55, 57, 64–67] |
| EQ-VAS | [17, 23, 26, 38, 40, 55, 66] |
| CDC-HRQoL-4 | [46] |
| CDC-HRQoL-14 | [58] |
| PROMIS | [31] |
| QoL scale | [10] |
| SF-8 | [44] |
| SF-12 | [9, 11, 12, 14, 24, 27, 30, 32, 47, 59, 63, 69] |
| SF-36 | [8, 13, 15, 16, 18, 21, 30, 33, 36, 45, 48–50, 52–54, 59–63] |
| EUROHIS-QoL 8-item | [34] |

AQoL-4D Assessment of Quality of Life, *CASP-16* Control, Autonomy, Self-realization and Pleasure; *EQ-5D* EuroQoL, *EQ-VAS* Visual Analogue Scale, *CDC HRQoL-14* Healthy Days measures, *CDC HRQoL-4* Healthy Days core questions, *PROMIS* Patient-Reported Outcomes Measurement Information System - Global Health Scale, *QoL scale* Quality of life scale, *SF-8* 8-Item Short-Form Health Survey *SF-12* 12-Item Short-Form Health Survey; *SF-36* Medical Outcomes Study Short-Form 36, *EUROHIS-QoL* 8-item index

Table 3 Specific quality of life assessment instruments used in population-based surveys 2008–2018

| Abbreviated QoL Instrument | References |
|----------------------------|------------|
| AQLQ-M | [19] |
| CQoLC-K | [68] |
| DLQI | [17, 23] |
| EORTC-QLQ-C30 | [37, 68] |
| FLQA-d | [17] |
| IBDQ | [28] |
| OHIP-14 | [22, 56] |
| OIDP | [29] |
| RTQ | [18] |
| SIBDQ | [61] |
| Visual Function/QoL | [42] |

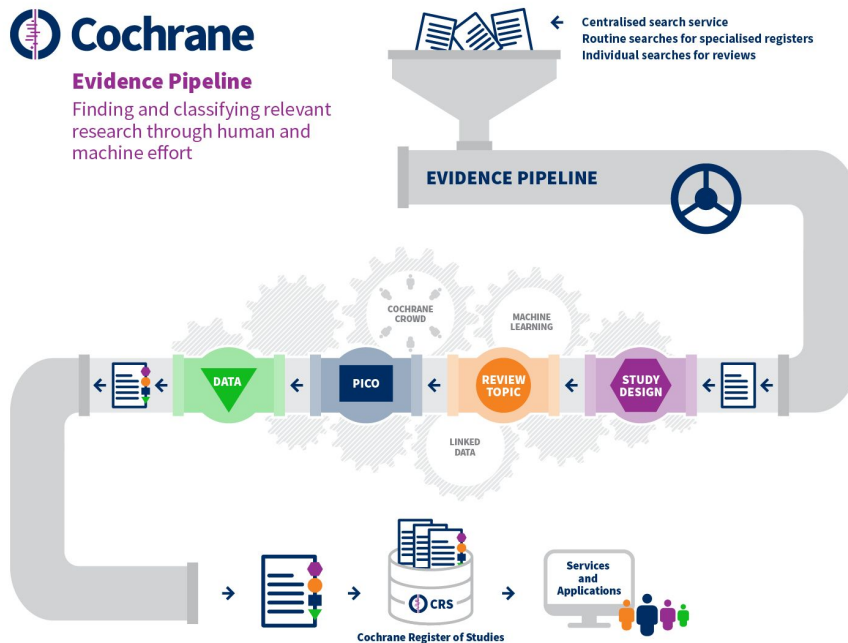
AQLQ-M Asthma Quality-of-Life Questionnaire, *CQoLC-K* Caregiver Quality of Life Index-Cancer Korean version, *DLQI*, Dermatology Life Quality Index, *EORTC-QLQ-C30* The European Organization for Research and Treatment of Cancer Quality of Life Questionnaire Core 30; *FLQA-d* Freiburg Quality of Life Assessment for Dermatitis, *IBDQ* Inflammatory Bowel Disease Questionnaire, *OHIP-14*, Oral Health Impact Profile, *OIDP* The Oral Impacts on Daily Performance, *RTQ* ReTransQoL, *SIBDQ* Short Inflammatory Bowel Disease Questionnaire, *Visual Function/QoL*

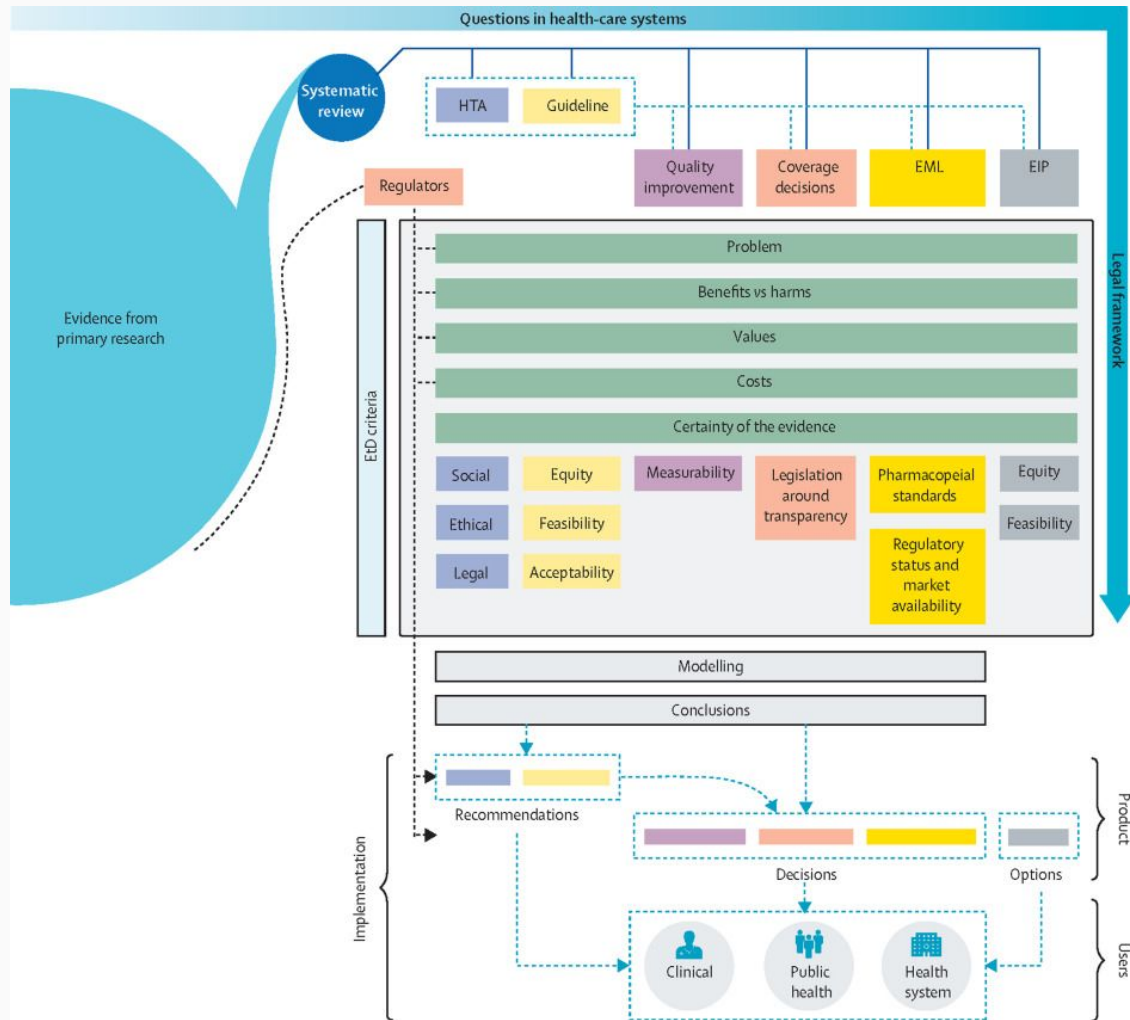
¿Entonces ... Revisiones sistemáticas y metaanálisis para valorar QoL? SÍ!!!



Evidence Pipeline

Finding and classifying relevant research through human and machine effort



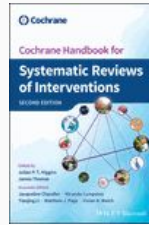


“The ecosystem of health decision making”

(Schunemann 2022)

¿qué dice el
manual?

Chapter 18: Patient-reported outcomes



- Summary data on patient-reported outcomes (PROs) are important to ensure healthcare decision makers are informed about the outcomes most meaningful to patients.
- Authors of systematic reviews that include PROs should have a good understanding of how patient-reported outcome measures (PROMs) are developed, including the constructs they are intended to measure, their reliability, validity and responsiveness.
- Authors should pre-specify at the protocol stage a hierarchy of preferred PROMs to measure the outcomes of interest.

Higgins JPT, Thomas J, Chandler J, Cumpston M, Li T, Page MJ, Welch VA (editors). Cochrane Handbook for Systematic Reviews of Interventions version 6.5 (updated August 2024). Cochrane, 2024. Available from www.training.cochrane.org/handbook.

Desafíos en la interpretación

La interpretación es difícil cuando se utilizan diferentes instrumentos de medición para el mismo constructo entre ensayos clínicos.

“QOL is an important endpoint in medical and health research, and QOL research involves a variety of patient groups and different research designs. Based on the current evaluation of the methodological and conceptual clarity of QOL research, we conclude that the majority QOL studies in health and medicine have conceptual and methodological challenges”

Quality of Life Research (2019) 28:2641–2650
<https://doi.org/10.1007/s11136-019-02214-9>

REVIEW



A systematic review of quality of life research in medicine and health sciences

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Accepted: 20 May 2019 / Published online: 11 June 2019
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Abstract

Purpose Quality of life (QOL) is an important concept in the field of health and medicine. QOL is a complex concept that is interpreted and defined differently within and between disciplines, including the fields of health and medicine. The aims of this study were to systematically review the literature on QOL in medicine and health research and to describe the country of origin, target groups, instruments, design, and conceptual issues.


Methods A systematic review was conducted to identify research studies on QOL and health-related quality of life (HRQOL). The databases Scopus, which includes Embase and MEDLINE, CINAHL, and PsycINFO were searched for articles published during one random week in November 2016. The ten predefined criteria of Gill and Feinstein were used to evaluate the conceptual and methodological rigor.

Results QOL research is international and involves a variety of target groups, research designs, and QOL measures. According to the criteria of Gill and Feinstein, the results show that only 13% provided a definition of QOL, 6% distinguished QOL from HRQOL. The most frequently fulfilled criteria were: (i) stating the domains of QOL to be measured; (ii) giving a reason for choosing the instruments used; and (iii) aggregating the results from multiple items.

Conclusion QOL is an important endpoint in medical and health research, and QOL research involves a variety of patient groups and different research designs. Based on the current evaluation of the methodological and conceptual clarity of QOL research, we conclude that the majority QOL studies in health and medicine have conceptual and methodological challenges.

<https://doi.org/10.1007/s11136-019-02214-9>

How is quality of life defined and assessed in published research?

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Accepted: 12 March 2021
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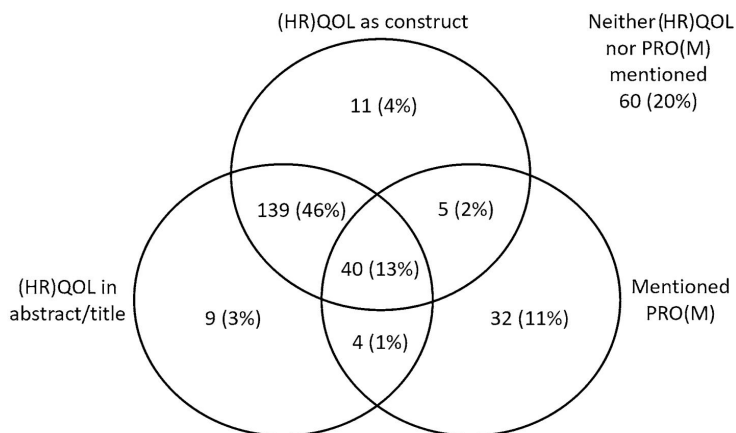


Fig. 1 Summary of coding of 300 articles published in *Quality of Life Research* in 2017

“These results demonstrate considerable heterogeneity in the definition and operationalisation of (HR)QOL, between and within studies. This limits meaningful interpretation of (HR)QOL scores and complicates literature searches. Investigators should define constructs and select instruments aligned with their definitions.”

Improving the interpretation of quality of life evidence in meta-analyses: the application of minimal important difference units

[Bradley C Johnston](#), [Kristian Thorlund](#), [Holger J Schünemann](#), [Feng Xie](#),
[Mohammad Hassan Murad](#), [Victor M Montori](#) & [Gordon H Guyatt](#) 

Health and Quality of Life Outcomes **8**, Article number: 116 (2010) | [Cite this article](#)

7279 Accesses | 7 Altmetric | [Metrics](#)

Abstract


Systematic reviews of randomized trials that include measurements of health-related quality of life potentially provide critical information for patient and clinicians facing challenging health care decisions. When, as is most often the case, individual randomized trials use different measurement instruments for the same construct (such as physical or emotional function), authors typically report differences between intervention and control in standard deviation units (so-called "standardized mean difference" or "effect size"). This approach has statistical limitations (it is influenced by the heterogeneity of the population) and is non-intuitive for decision makers. We suggest an alternative approach: reporting results in minimal important difference units (the smallest difference patients experience as important). This approach provides a potential solution to both the statistical and interpretational problems of existing methods.

Chapter 6: Choosing effect measures and computing estimates of effect



Quality of Life in Palliative Care: A Systematic Meta-Review of Reviews and Meta-Analyses



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Abstract:

Background: The area of palliative care is a setting in which the evaluation of the quality of life (QoL) is fundamental. However, the topic has been covered from many different points of view, and there is a lack of comprehensive synthesis of the evidence drawn from the available literature.

Objective: We carried out a meta-review of all available systematic reviews and meta-analyses that have dedicated part or most of the investigation to the assessment of QoL in palliative care to provide the most updated and comprehensive depiction of all available information about measurement and intervention aimed at improving QoL in palliative care.

Methods: A meta-review of all recent (5 years) available systematic reviews and meta-analyses on “palliative care” and “quality of life” was carried out. The quality of the extracted studies was assessed with the AMSTAR scale.

Results: The search extracted 24 systematic reviews, 14 systematic reviews followed by a meta-analysis on a subset of data, and 2 meta-analyses. In many studies, the investigation of QoL represented a secondary or even marginal outcome. In general, the results supported the efficacy of palliative care in terminal patients or patients with a permanent disability. However, the quality of the studies had a strong influence on the chance that some improvement in QoL was found in relation to palliative care. Studies of lower quality were more likely to report some efficacy of palliative care than studies with better quality.

Conclusion: The investigation of QoL in palliative care is understudied. In many studies, QoL is a secondary outcome, and there is some tendency to use a disparate range of tools to measure it, whose reliability and validity should still be established in some groups of patients.

Keywords: Quality of life, Palliative care, Cancer, Advanced illness, Advanced heart failure, Meta-analysis.

Recomendaciones para mejorar la interpretabilidad

Los autores de revisiones sistemáticas pueden:

- Presentar los resultados agrupados como diferencia de medias estandarizada
- Utilizar métodos adicionales para presentar resultados: Efectos de tratamiento dicotomizados relativos (riesgo relativo, odds ratio) o absolutos (diferencia de riesgo).

Complementar con presentaciones en:

- Unidades naturales (ej. reducción de 2.4 puntos en una escala de 50 puntos)
- Unidades de diferencia mínima importante (ej. 0.38 unidades menos que el grupo control, donde 1.0 unidad representa la diferencia más pequeña percibida como importante)
- Ratio de medias (ej. ratio de 1.27, representando una reducción relativa del 27% en la puntuación media)

Concluyendo...

CVRS es importante para comprender la consecuencias de la enfermedad y el tratamiento, y para la atención médica, toma de decisiones.

Hay un necesidad de mejoras en este campo, y los investigadores deberían prestar más atención a las cuestiones metodológicas y conceptuales al planificar estudios de calidad de vida.

Gracias!

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