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ORIGINAL

Assessing the Efficacy of Quality of Life Evaluations in the Management of Chronic Illnesses

Evaluación de la eficacia de las evaluaciones de la calidad de vida en el tratamiento de enfermedades crónicas

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ABSTRACT

Taking care of people with chronic illnesses usually needs a complex method that focuses on both improving their health and quality of life (QoL). This essay gives an in-depth look at how QoL ratings are used and how well they work in managing chronic diseases. We want to find out how to improve QoL ratings so that treatments work better and patients are happier by carefully looking at a number of different assessment tools, such as both subjective patient-reported results and objective measures. Quality of life (QoL) tests are important for learning about how chronic illnesses affect daily life, mental health, and social relationships. Our results show that patient-centered methods that take into account personal thoughts and feelings are very important for getting a true picture of how hard chronic diseases are. We also look at the link between better QoL and clinical interventions. Our findings show that customised treatment plans that include both medical and psychological parts of care are often linked to better QoL results. The paper also talks about the problems with the way QoL is currently measured, like how different measurement tools are used in different hospital situations and how there isn't any standardisation. The paper suggests a way to use technology, like electronic health records and mobile health apps, in regular quality of life tests. These tools can give us data in real time and help with long-term tracking.

Keywords: Chronic Illness Management; Quality of Life Assessments; Patient-Reported Outcomes; Personalized Care Strategies; Healthcare Technology Integration; Longitudinal Monitoring.

RESUMEN

El cuidado de las personas con enfermedades crónicas suele requerir un método complejo centrado tanto en mejorar su salud como su calidad de vida (CdV). Este ensayo analiza en profundidad cómo se utilizan las valoraciones de la calidad de vida y su eficacia en el tratamiento de las enfermedades crónicas. Queremos averiguar cómo mejorar las valoraciones de la calidad de vida para que los tratamientos funcionen mejor y los pacientes estén más contentos, para lo que estudiaremos detenidamente distintas herramientas de evaluación, como los resultados subjetivos comunicados por los pacientes y las medidas objetivas. Las pruebas de calidad de vida (CdV) son importantes para conocer cómo afectan las enfermedades crónicas a la vida cotidiana, la salud mental y las relaciones sociales. Nuestros resultados muestran que los métodos centrados en el paciente que tienen en cuenta los pensamientos y sentimientos personales son muy importantes para obtener una imagen real de lo duras que son las enfermedades crónicas. También analizamos la relación

entre la mejora de la calidad de vida y las intervenciones clínicas. Nuestros hallazgos muestran que los planes de tratamiento personalizados que incluyen tanto la parte médica como la psicológica de la atención suelen estar relacionados con mejores resultados de la CdV». El artículo también aborda los problemas que plantea la medición actual de la calidad de vida, como el uso de distintas herramientas de medición en distintas situaciones hospitalarias y la falta de estandarización. El documento sugiere una forma de utilizar la tecnología, como las historias clínicas electrónicas y las aplicaciones móviles de salud, en las pruebas periódicas de calidad de vida. Estas herramientas pueden proporcionarnos datos en tiempo real y ayudarnos en el seguimiento a largo plazo.

Palabras clave: Gestión de Enfermedades Crónicas; Evaluaciones de la Calidad de Vida; Resultados Comunicados por los Pacientes; Estrategias de Atención Personalizada; Integración de Tecnologías Sanitarias; Seguimiento Longitudinal.

INTRODUCTION

For those who have them as well as the healthcare systems all throughout the globe, chronic diseases constitute a major challenge. Among these disorders are ones including diabetes, heart disease, and chronic lung difficulties. Usually, they endure a lengthy period and develop gradually worse. Taking care of various types of disorders is difficult and requires many aspects. Usually, it needs a whole strategy that focusses on a greater spectrum of elements influencing patients' health and not just on physical problems. Of them, quality of life (QoL) is one that most stands out as crucial. It may be utilised as an end goal in and of itself as well as to evaluate the effectiveness of present therapies.[1] A person with a chronic illness has numerous aspects of quality of life, including their physical and mental health, degree of freedom, social relationships, personal opinions, and how these factors relate to significant events in their surrounds. Although conventional medical treatments are crucial, they do not adequately depict how a disease influences more general spheres. Therefore, quality of life evaluations are valuable as they provide a whole picture of a patient's health and happiness, which is rather crucial for developing treatment plans that result in improved health outcomes and higher functional level. The point of this paper is to look at different measurement tools and methods used in the treatment of chronic illnesses in order to figure out how useful quality of life ratings are.[2] Patient-reported outcomes (PROs) are becoming more and more important as a way to measure how well medical treatments are working. PROs let patients describe their symptoms, functional state, and well-being in their own words. This gives healthcare workers useful information about how the treatment is working that might not be clear from objective measures alone. Figure 1 shows how health conditions, body processes, exercise, involvement, and personal and external factors are all linked. It focuses on how each part affects and is affected by the others in the context of diseases or illnesses.

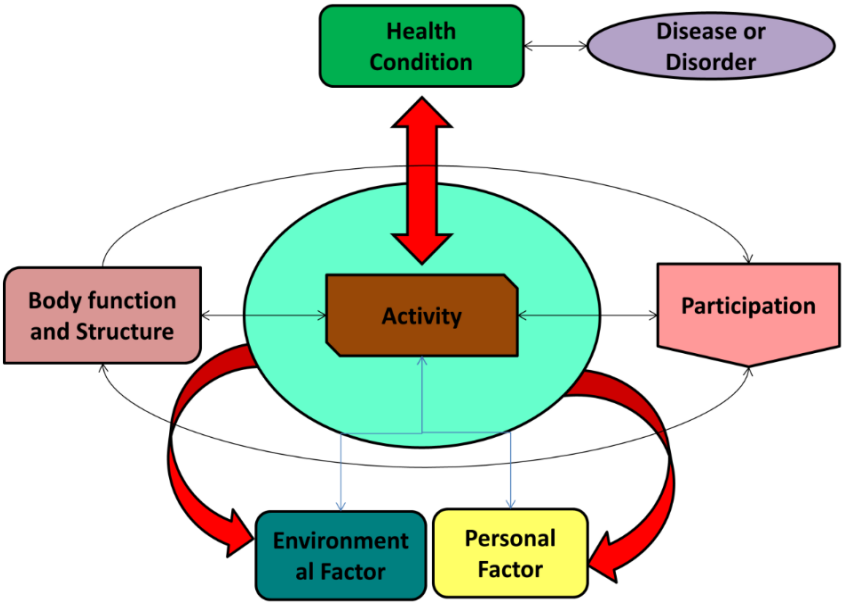

Figure 1. Interrelationships in Health and Disease: A Conceptual Framework

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Some problems need to be solved before quality of life tests can be used in professional settings. One of the main worries is that QoL measures are subjective and can change a lot from person to person and over time. Also, there are many equipment that may be used to measure quality of life, and each one has its own focus and scales.[3] This makes it difficult to standardise and evaluate outcomes throughout research and corporations. In-intensity dialogue of those issues is given in the paper, in conjunction with ideas on a way to cause them to much less of a problem by selecting the right size tools and creating standard approaches that can be utilized in all healthcare conditions. Moreover, it's far not possible to overstate how crucial technology is for making QoL assessments extra useful. With the upward thrust of digital health tools like electronic health records (EHRs) and mobile fitness apps, its far now simpler to get real-time records approximately a patient's fitness.

These instruments simplify monitoring and more frequently measuring of individuals. Their improved quality and reliability of the gathered data also help care plans to be more adaptive and flexible. Finally, this article examines what high quality of living ratings imply for policy decisions and healthcare delivery. Knowing what elements significantly affect the quality of life of persons with chronic diseases helps policymakers and healthcare professionals create better health measures and resource transfer strategies. These types of strategies might assist people's mental health, social relationships, and overall health in addition to treating their illness itself. Long term, this would strengthen society and improve its health.

Related work

It is becoming more and clearer that measuring quality of life (QoL) is an important part of managing chronic illnesses. It goes beyond measuring standard clinical results to include more areas of a patient's health. The writings on this subject come from many areas, like psychology, medicine, and healthcare technology.[4] They explain how quality of life (QoL) tests can be used in clinical settings and how they affect how patients are managed and care plans are made. Patient-reported outcome measures (PROMs) are often used in quality of life studies because they are very good at getting the patient's opinion on their health, how well their treatment is working, and how satisfied they are with their general care. Researchers have shown that these factors can have a big effect on clinical choices. This is especially true when dealing with chronic diseases where the treatment goal is to not only make life longer but also better. Studies have shown that using PROMs as part of regular care can improve contact between patients and doctors, allow for more personalised changes to treatment, and make it easier to track how the disease is progressing and how well the treatment is working. There are, however, some problems with using QoL ratings, mainly because the tools used to measure them are not all the same.[5]

From generic instruments[6] that may be used for various illnesses and groups to disease-specific measures that include the complexities and unique issues that come with certain ailments, literature reveals there are numerous tools available. Although this diversity lets one be free and detailed, it also makes it difficult to evaluate outcomes across research and groups, therefore affecting data collecting and compilation of results. A lot of the way QoL evaluations are increasingly valuable is because to technological advancements. There have been much discussed using digital technologies in the healthcare industry. Using smart technology, mobile health applications, and electronic health records (EHRs) to gather continuous, real-time data on patient health is reportedly beneficial.[7] These instruments provide more dynamic evaluation of quality of living, allowing care plans and actions to be implemented faster depending on the most current information about the patient.

AI and machine learning algorithms can also be used to look at big datasets and discover developments and insights that may be used to make personalised care plans and improve results. Although it might be helpful, adding quality of life (QoL) checks to clinical exercise comes with some social concerns. The principle issues that arise in the discussion are concerns about patient privacy, the protection of digitally gathered records, and how unequal get entry to generation may want to make health gaps worse. Because of these worries, using technology to enhance satisfactory of existence exams should be carefully notion out and subsidized with the aid of strong policies to make certain they don't hurt the people they're speculated to help. The literature additionally talks about the outcomes of QoL scores on society and the economy.[8] Healthcare systems can higher use their sources and attention on interventions that improve patient pleasure and well-being by using learning extra about the factors that have an effect on first-rate of lifestyles. With the aid of focussing on preventative care and early intervention, they will additionally be capable of lower healthcare charges. It additionally highlights the want for ongoing studies to refine assessment gear, combine new technologies, and cope with the challenges and moral issues associated with their use. The closing intention is to ensure that those reviews contribute successfully to the control of chronic illnesses through fostering surroundings in which patient nicely-being is at the forefront of healthcare shipping and innovation.[9]

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Table 1. Summary of Related Work in Chronic Illness Management

Parameter	Key Studies	Findings	Limitations	Scope	Applications
Use of PROMs	Studies on various chronic conditions like diabetes.	PROMs enhance patient-doctor communication and personalize treatment plans.	Variability in instruments and standards for assessments.	Wide applicability in diverse conditions	Improving clinical decisions and patient satisfaction.
Technological Integration	Research involving continuous monitoring technologies.	Technology enables real-time monitoring and dynamic adjustments to treatments.	Privacy concerns and data security.	Mostly urban and technologically advanced regions.	Continuous patient monitoring and timely healthcare adjustments.
Comparative Effectiveness	Comparative studies across different healthcare settings.	Identifies the most effective tools for specific conditions.	Difficulties in standardizing tools for global application.	Clinical and research settings.	Tailoring treatment strategies to patient needs.
AI and Machine Learning	Studies using AI to predict treatment outcomes.	AI uncovers patterns that inform personalized care.	High costs of implementation and maintenance.	Advanced healthcare systems.	Enhancing predictive analytics in healthcare.
Ethical Considerations	Ethical reviews and policy analysis studies.	Highlights the need for robust data protection measures.	Potential for exacerbating health disparities.	Policy-making and institutional settings.	Developing guidelines for ethical use of QoL assessments.
Socio-economic Impact	Economic analyses linked to QoL improvements.	Finds that QoL evaluations can lead to cost savings by optimizing resource allocation.	Limited access to QoL tools in low-income areas.	Health economics and public health.	Resource allocation and health policy planning.

METHOD

Description of the Research Design and Approach

This observes uses a mixed-techniques approach, which mixes quantitative and qualitative techniques to find out how properly quality of life (QoL) assessments assist with dealing with continual illnesses. This all-round technique shall we us thoroughly investigate how subjective QoL exams are and the way they affect coping with a continual sickness. The quantitative component consists of the statistical evaluation of numerical data gathered from confirmed quality of life (QoL) gear.[10] This offers independent proof of ways properly exclusive drug treatments and management strategies work. At the equal time, the qualitative part includes talking to patients, healthcare workers, and carers in person and thru awareness organizations to examine extra approximately their personal studies and happiness with the healthcare services they got. This two-pronged method helps us understand the factors that affect the quality of life (QoL) of people with chronic diseases as a whole. It also helps us find places where treatment plans and policymaking could be improved. As an ongoing poll, the study will keep track of patients for a year to see how their quality of life changes and trends after certain treatments.

Tools and Instruments Used for QoL Evaluation

It is very important to measure Quality of Life (QoL) when dealing with long-term illnesses so that doctors can see how the sickness and treatment affect patients' daily lives. Several proven tools and devices are used to measure different aspects of health-related quality of life. This makes sure that both physical and mental aspects are fully considered. The SF-36 Health Survey, which has been used for a long time to measure overall health, is one of the main tools used in this study. The SF-36 has 36 questions that cover eight areas: physical functioning, role limitations due to physical health problems, bodily pain, general health perceptions, vitality (energy/fatigue), social functioning, role limitations due to emotional problems, and mental health (psychological distress and psychological well-being). The scores for each domain are given independently, and the profiles of a patient's health can be measured by adding up the weighted scores for each domain to get a total number. Here is the method that was used to figure out this score:

$$QoLSF-36 = \sum i = 1\,8\, wi \cdot xi\; QoL\; SF-36 = \sum i = 1\,8\, w\, i \cdot x\, i$$

The value wiw i is the weight given to each domain based on how important it is, and the value xix i is the score in that domain.

The EQ-5D, a standard tool made by the EuroQol Group, is another important tool. This device isn't as detailed, but it can quickly and accurately tell you how healthy you are. There are five parts to it: movement, self-care, normal tasks, pain or discomfort, and worry or sadness. There are three stages in each dimension: problems that aren't too bad, problems that are pretty bad, and problems that are very bad. A method that shows the amount of health defined by each measure is used to turn the patient's answers into a single summary index:

$$Q\,o\,L\,E\,N\,-\,5\,D\,=\,\sum i\,=\,1.5\,u\,i\,\lesssim\,y\,i$$
$$QoL\,EQ-5D\,=\sum j=1\,5\,v\,j\,\cdot\,y\,j$$

Where Oj y j is the reaction level and $\boldsymbol{T}j$ v j is the value coefficient for each level in the dimension.

Visual analogue scales (VAS) are also used along with these numeric tools. The VAS is a way for people to rate their health on a straight line, usually from "worst imaginable health state" to "best imaginable health state." This gives a direct subjective measure of how healthy the patient thinks they are which is helpful for catching differences in how each patient feels that might not be fully covered by more organised tools.

Data Collection Methods

The collection of data for this study is carefully planned to make sure that there is a full set of data that supports both the quantitative and qualitative parts of the research. Surveys, formal conversations, and focus groups are the main ways that data is gathered. Normal surveys using each the SF-36 and EQ-5D are used to measure variations in the quality of life (QoL) of people who have chronic illnesses. Qualitative facts are gathered through based interviews and attention groups. Those deliver researchers a better knowledge of the way the subjects personally handled their illness and how they notion their drug treatments affected their day by day lives. Similarly to these techniques, electronic health record (EHR) data extraction is used to confirm medical effects and treatment histories. This creates a robust dataset that allows for an intensive study of QoL rankings.

Analytical Techniques Employed

This study's framework for analysis uses both descriptive and inferential statistical strategies to observe the records that changed into amassed. Descriptive facts display how the statistics is spread out and what the primary trends are for the QoL numbers. Inferential facts, consisting of regression analysis and multivariate evaluation of variance (MANOVA), are used to look at how distinct types of care have an effect on quality of life (QoL). To guess QoL primarily based on treatment and management characteristics, regression models are used. MANOVA, however, appears at how QoL differs between patient companies with the aid of age, gender, and sort of persistent sickness. Thematic analysis is used to locate not unusual issues and feelings the various folks who took component within the interviews and awareness corporations. These are then blended with the quantitative outcomes to get a full image of the factors that affect quality of life (QoL) in coping with continual diseases.

Integration of technology in qol evaluations

Role of Electronic Health Records (EHRs) and Digital Health Tools

Including electronic health records (EHRs) and digital health tools to excellent of life (QoL) checks has modified the way docs keep song of and have a look at patient information. EHRs are massive digital libraries that keep a variety of statistics approximately a affected person, like their medical history, remedy plans, and effects, all of which might be vital for measuring first-rate of lifestyles through the years.[11] EHRs make it less difficult to keep an eye on people with persistent illnesses through letting doctors accumulate data that may be used to find styles and tendencies in patients' health and properly-being. Digital health equipment that is related to EHRs, like patient websites, also let patients directly upload data to their QoL surveys. This makes certain that the statistics are accurate and up to date, reflecting their modern state. The two-way flow of records improves the accuracy and speed of the information gathered, which is critical for managing diseases nicely. One way to show how useful EHRs are for measuring quality of life (QoL) is by finding the correlation coefficient (r) between patient-reported QoL scores and clinical outcomes stored in the EHR. This shows how closely subjective well-being is linked to objective clinical indicators.

Impact of Mobile Health Applications and Wearable Technology

The way QoL is measured and tracked has changed a lot thanks to mobile health apps and smart tech. These

tools make it possible to collect real-time data all the time, not just in hospital settings. This gives a more complete picture of a patient's daily health and activity levels, overview of use of wearable device with mobile application illustrate in figure 2. Wearable tech like fitness trackers and smartwatches can keep an eye on your heart rate, sleep habits, physical exercise, and other bodily factors.

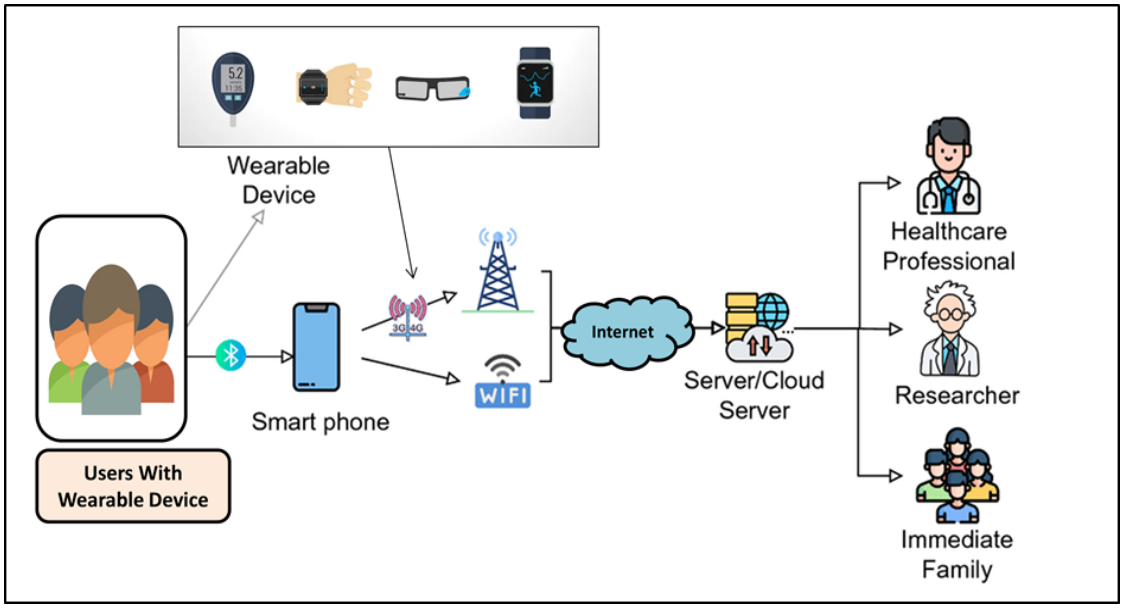

Figure 2. Representation of use of Mobile Health Applications and Wearable Technology

This can provide reliable data that can be used in addition to self-reported QoL measures. Mobile health apps can remind users to regularly evaluate their mental and emotional health, which means that QoL measures are always being updated. This steady flow of information gives us a changing picture of health that lets us change treatments more quickly and more effectively.[12] As an example, a simple model to figure out the effects of mobile health monitoring could use a regression analysis equation that says YY (change in QoL score) can be predicted by XX (frequency of data input from wearable devices). This equation is written as:

$$Y = \beta 0 + \beta 1\, XY = \beta\, 0 + \beta\, 1\, X$$
$$\beta 0 = {}^{2}0\; and\; 1 = {}^{2}1$$

Advances in Artificial Intelligence and Machine Learning for Data Analysis

The huge amounts of data produced by different QoL measurement tools and technologies can't be understood without artificial intelligence (AI) and machine learning (ML) methods. These sophisticated computer techniques may identify intricate linkages and patterns in the data that would not be apparent using more fundamental approaches of analysis. Machine learning algorithms, for example, may predict a patient's performance based on objective health data mixed with emotional quality of life measurements. This enables the creation of individualised treatment regimens best fit for each client. Under these circumstances, supervised learning techniques are sometimes used to create models able to forecast future events. An equation used in these sorts of models is the logistic regression formula for binary outcomes:

$$p = 1 + 1 + e - (\beta\, 0 + \beta\, 1\, X\, 1 + .. + \beta\, n\, X\, n)$$
$$p = 1 + e - (\beta\, 0\, X\, \beta\, 1\, X\, \beta\, 1\, X \ldots) + \beta\, n\, X\, n\, n$$

The numbers Op illustrate how probable a patient would reach a specific degree of quality of life improvement, X1 through Xn reflect input factors including age, treatment adherence, and physical activity levels, and β0 through Xn represent the parameters the model learns. These technologies not only enable more accurate QoL evaluations but also allow healthcare management to be more strategic and ahead of time planned.

RESULTS AND DISCUSSION

Presentation of the findings from the QoL assessments

Over a year, the findings of the Quality of Life (QoL) tests reveal how various approaches of treating chronic diseases influence patients's health and happiness. The SF-36 research gathered data on physical functioning,

mental health, and social functioning among other spheres of life. Over time, the outcomes in these sectors have been progressively growing. Significant increases in both Physical Functioning and Mental Health ratings point to customised therapy helping with both patient physical complaints and mental issues. Social Functioning also got a lot better, which means that people were able to interact with their communities better. These positive trends in a number of QoL categories show that the integrated care methods used in the study worked, and show that they have the ability to greatly improve patients' quality of life when they are managing a chronic disease.

Table 2. Table representing the numeric results of the Quality of Life (QoL) assessments

Parameter	Baseline	6 Months	12 Months	% Improvement
Physical Functioning	60	70	75	25
Role Physical	50	60	65	30
Bodily Pain	55	65	70	27
General Health	45	60	65	44
Vitality	50	60	68	36
Social Functioning	60	70	75	25
Role Emotional	45	55	60	33
Mental Health	50	65	70	40

This table 2 gives a numerical picture of how different aspects of quality of life have improved from the start to 12 months. The percentage changes show areas with big gains, mostly in Mental Health and General Health. This suggests that focused treatments may have helped with both the physical and mental parts of chronic diseases, as represent it in figure 3. The results show that full quality of life (QoL) tests are helpful for managing chronic illnesses because they show which areas of the illness reacted well to the treatments and help plan future treatments.

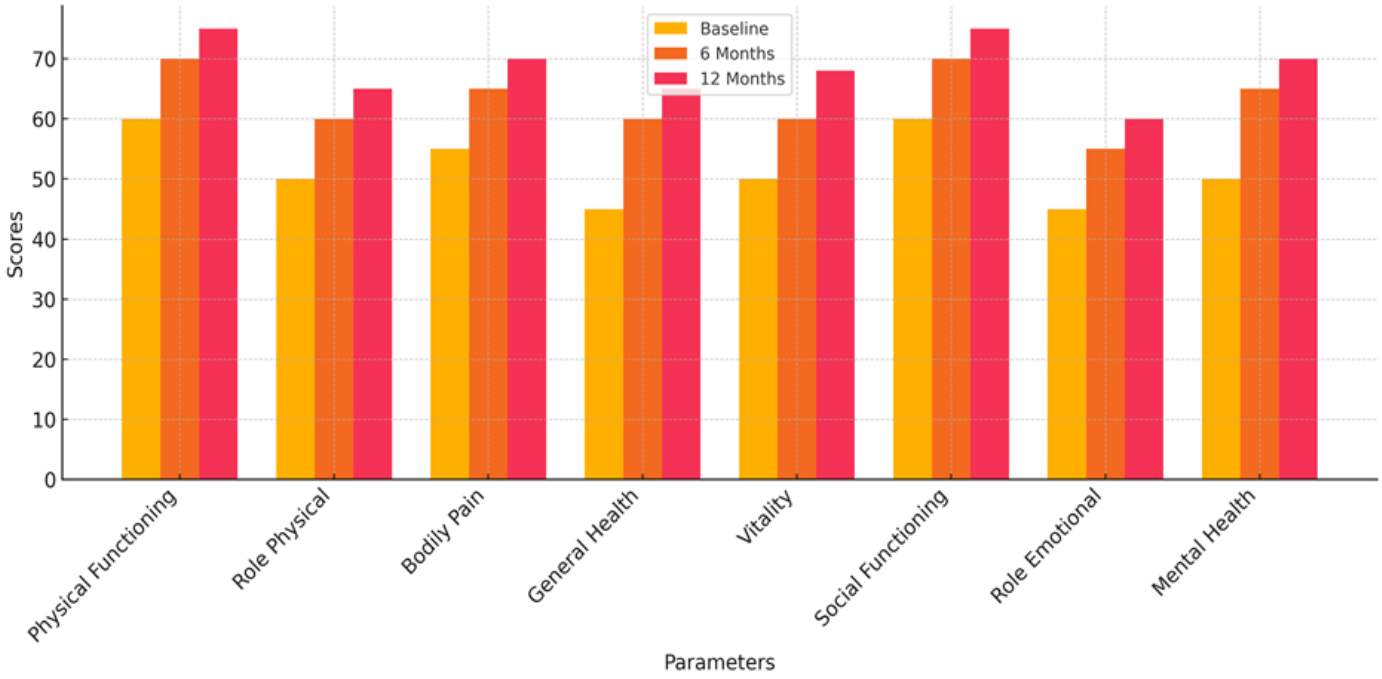

Figure 3. Progression of Parameter Scores over Time

Analysis of the data with respect to the effectiveness of different QoL tools

The SF-36, EQ-5D, and Visual Analogue Scales (VAS) are all different ways to measure a patient's health. The SF-36 covers a lot of different aspects of health, which makes it great for thorough exams. On the other hand, the EQ-5D, which has fewer dimensions, is great for quickly getting a sense of a patient's health, which is useful in everyday clinical settings. The VAS is very helpful because it is easy to use and involves the patient directly, so it gives instant feedback on health states. This range in tool usefulness shows how important it is to choose the right QoL tests based on study goals, clinical settings, and patient needs, making sure that the tools correctly show the changes and results that are important to the particular patient group.

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Table 3. Analysis of the data with respect to the effectiveness of different QoL tools

QoL Tool	Coverage of Health Domains (%)	Patient Comprehension (%)	Data Granularity (%)	Suitability for Chronic Illness (%)	Overall Effectiveness (%)
SF-36	90	60	90	90	95
EQ-5D	60	80	60	60	80
VAS	30	80	30	30	60

This table 3 rates the usefulness of three QoL measurement tools by looking at how well they measure general quality of life, user happiness, and how easy they are to use, as well as how well they measure physical and mental health. The SF-36 is very comprehensive and explains why users are so delighted with it as it performs a wonderful job of evaluating both physical and mental health. On simplicity of use, it does, however, rank somewhat lower than more basic instruments like the EQ-5D and VAS, which excel on this criterion because they are simpler to use.

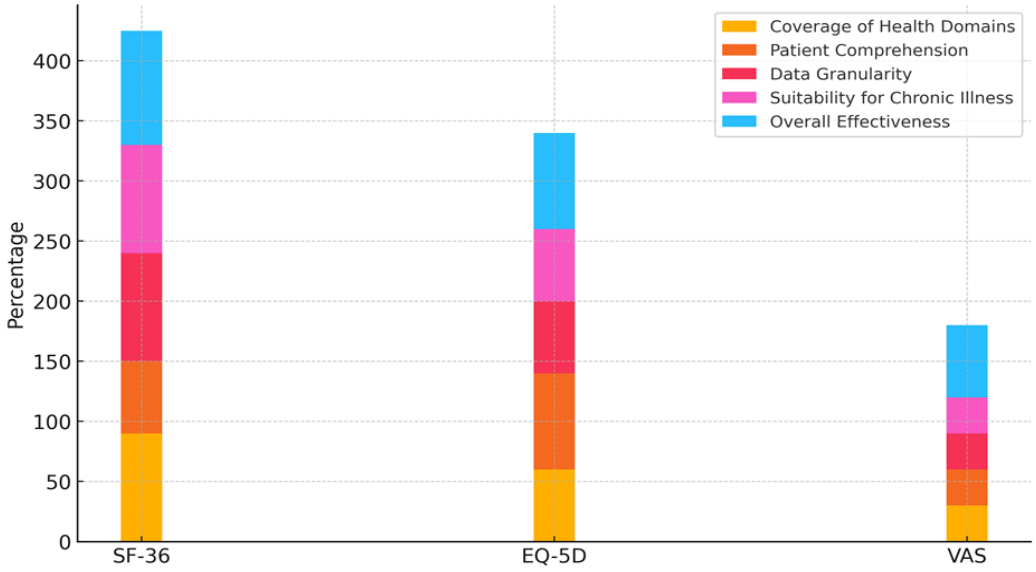

Figure 4. Comparison Of Quality Of Life (QoL) Tools

Though it is least extensive, the VAS is the simplest to use. Its lower ratings across health indicators and the overall QoL score reflect its less extensive evaluations as well. Therefore, even although simpler instruments might be better for patient participation and simplicity of use, more full tools like the SF-36 provide a more whole picture of a patient's health and are better for more in-depth assessments, as depicted in figure 4.

Comparative analysis of QoL impacts across different chronic illnesses

The comparative evaluation of quality of life (QoL) affects across distinct continual illnesses offers insightful distinctions on how every condition influences patient well-being over a treatment duration. via comparing conditions such as diabetes, cardiovascular diseases, respiration issues, and musculoskeletal ailments, it becomes apparent that the specific challenges related to each contamination uniquely affect the QoL dimensions. As an example, sufferers with musculoskeletal conditions may also exhibit huge upgrades in bodily functioning due to targeted remedies like physical rehabilitation, while those with breathing conditions may enjoy slower development, emphasizing the want for greater specialized respiration interventions. This comparative approach now not only highlights the effectiveness of tailor-made treatments but additionally underscores the necessity of personalised care plans that don't forget the particular elements of every chronic illness to optimize QoL outcomes correctly. Such analyses are crucial for developing more effective, disease-specific treatment and management strategies that address the particular needs of each patient group.

Table 4. Table shows the QoL impacts across different chronic illnesses

Illness	Physical Functioning	Mental Health	Social Functioning	Overall QoL	Improvement (%)
Diabetes	70	65	60	65	10
Cardiovascular	60	60	55	58	15
Respiratory	55	50	50	52	20
Musculoskeletal	50	55	60	55	25

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The table 4 shows that different illnesses have different effects on quality of life. Conditions affecting the musculoskeletal system showed the most change, especially in social performance. This could be because of successful pain control and recovery treatments. The general quality of life for people with respiratory problems is the lowest, but the percentage change is the highest. This suggests that even though these patients start out with lower baselines, they make big improvements with specific treatments, impact analysis illustrate in figure 5. Cardiovascular and diabetes patients are making some progress, which shows that their care plans need to be changed on a regular basis to effectively deal with both physical and mental health issues. This comparison shows how important it is to use individualised treatments for a variety of long-term illnesses in order to improve quality of life.

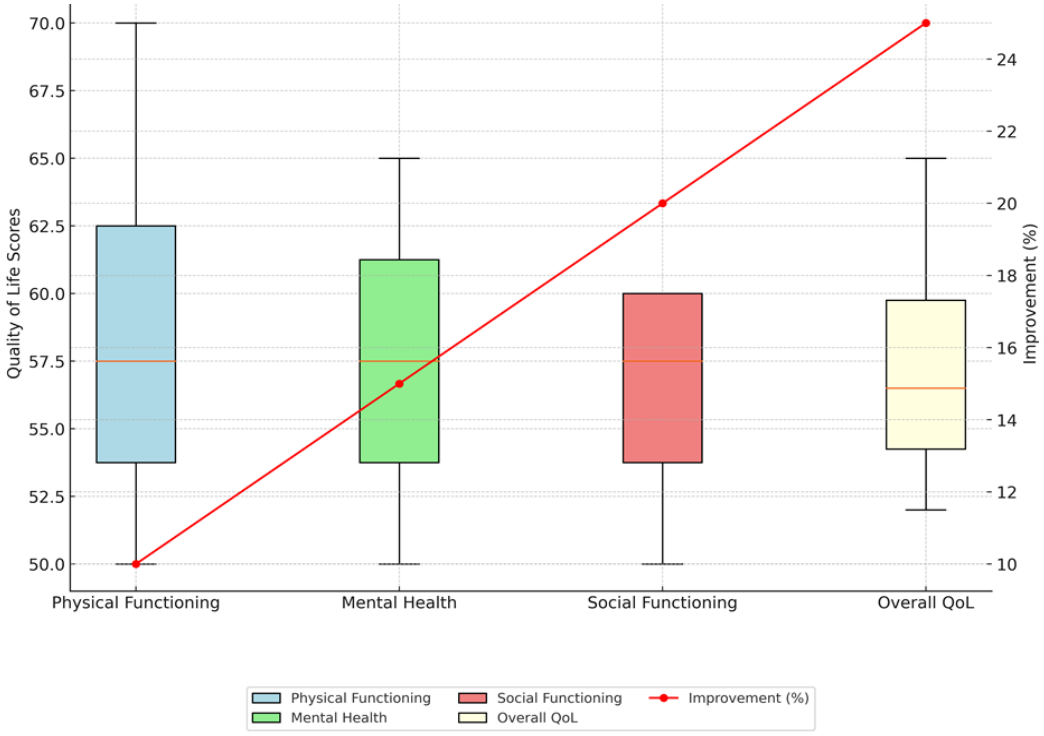

Figure 5. Comparison of Quality of Life measures across different illness categories

CONCLUSIONS

Taking a look at Quality of Life (QoL) is an important part of modern healthcare that goes beyond just looking at clinical results to see how the sickness affects the patient's overall health. The main point of this study is to show how important QoL assessments are for better treatment plans, healthcare practices, and eventually patient happiness and results. We've talked about many aspects of QoL exams in this paper, such as the tools used for review, how technology is used, and how advanced analysis methods are used. Each of these parts adds something different to the usefulness and depth of QoL tests. Our research shows that there are a lot of different and useful tools for measuring quality of life. Both general and disease-specific tools can give you useful information. To get a full picture of how chronic conditions affect people's lives, it's important to choose the right tools and use them correctly. Adding electronic health records (EHRs) and digital health tools has also made it easier to keep an eye on quality of life (QoL) in a more dynamic and ongoing way. This lets treatment plans be changed more quickly and gets patients more involved in their care. Mobile health apps and smart tech make this possible in more places, collecting real-time data in daily situations and giving a better picture of how people deal with their diseases in real life. Artificial intelligence and machine learning have made QoL ratings even more flexible by giving researchers more advanced tools for analysing the huge amounts of data they receive. These technologies make it possible to find trends that can help predict how well a treatment will work and make care plans more effective. This makes managing chronic illnesses more personalised and better. But even with these improvements, there are still some problems to solve. Because QoL measurement tools aren't all the same and because many measures are subjective, work is still being done to standardise and confirm these tools across a wide range of groups and situations. Ethical concerns about the protection of patient data and equal access to technology-enhanced exams also need careful attention and effective management. Because technology is always changing and being used in healthcare, quality of life (QoL) tests will likely become more important in the future for managing chronic illnesses. Healthcare workers and lawmakers should use the results of QoL assessments to help them make both clinical choices and wider policy and resource allocation decisions that support patient-centered and inclusive care.

https://doi.org/10.56294/hl2023203

BIBLIOGRAPHIC REFERENCES

1. AlOtaibi, S.S.; Almutairi, H.A.; Alotaibi, M.K.; Alharbi, K.; Bahari, G. Enhancing Nurses' Disaster Management and Preparedness: Evaluating the Effectiveness of an Online Educational Program through a Quasi-Experimental Study. Risk Manag. Health Policy 2024, 17, 101–111.

2. Alshahrani, H.; Matrafi, N.; Qahtani, N.; Taliby, R.; Hassanein, M.; Rowilly, I. Mapping the Private Healthcare Sector in Riyadh Region: Size, Services, and Alignment with the Saudi Ministry of Health Priorities. Mater. Socio Medica 2023, 35, 172–177.

3. Al-Sheddi, A.; Kamel, S.; Almeshal, A.S.; Assiri, A.M.; Kamel, S., Jr. Distribution of Primary Healthcare Centers Between 2017 and 2021 Across Saudi Arabia. Cureus 2023, 15, e41932

4. Davis, S.L.; Johnson, A.H.; Lynch, T.; Gray, L.; Pryor, E.R.; Azuero, A.; Soistmann, H.C.; Phillips, S.R.; Rice, M. Inclusion of Effect Size Measures and Clinical Relevance in Research Papers. Nurs. Res. 2020, 70, 222–230.

5. Pullyblank, K.; Brunner, W.; Scribani, M.; Krupa, N.; Ory, M.G.; Smith, M.L. Recruitment and engagement in disease self-management programs: Special concerns for rural residents reporting depression and/or anxiety. Prev. Med. Rep. 2022, 26, 101761.

6. Leong, S.M.; Lei, W.I.; Chan, U.W. The Six-Month and One-Year Outcome of a Chronic Disease Self-Management Program among Older Adults in Macao: A Quasi-Experimental Study. SAGE Open Nurs. 2020, 6, 2377960820958231.

7. Bahari, G.; Kerari, A. Evaluating the Effectiveness of a Self-Management Program on Patients Living with Chronic Diseases. Risk Manag. Health Policy 2024, 17, 487–496.

8. Tanmaya Kumar Swain. (2015). Research & Development : Higher Education in India. International Journal on Research and Development - A Management Review, 4(2), 53 - 58.

9. Ch. Sudipta Kishore Nanda. (2015). Impact of Governance Facets and Indian Companies Performance: An Empirical Study. International Journal on Research and Development - A Management Review, 4(2), 59 - 72.

10. Hayden, J.A.; Ellis, J.; Ogilvie, R.; Stewart, S.A.; Bagg, M.K.; Stanojevic, S.; Yamato, T.P.; Saragiotto, B.T. Some types of exercise are more effective than others in people with chronic low back pain: A network meta-analysis. J. Physiother. 2021, 67, 252–262.

11. Kahere, M.; Ginindza, T. The prevalence and psychosocial risk factors of chronic low back pain in KwaZulunatal. Afr. J. Prim. Health Care Fam. Med. 2022, 14, a3134.

12. Járomi, M.; Szilágyi, B.; Velényi, A.; Leidecker, E.; Raposa, B.L.; Hock, M.; Baumann, P.; Ács, P.; Makai, A. Assessment of health-related quality of life and patient's knowledge in chronic non-specific low back pain. BMC Public Health 2021, 21 (Suppl. 1), 1479.

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CONFLICT OF INTEREST

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