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ABSTRACT:

Disability refers to “limitation on a person’s physical functioning, mobility, dexterity or stamina.” The objectives of this article is to determine the quality of life in differently abled population and to highlight the need for improving their lifestyle. A Systematic review was conducted in accordance with the PRISMA guidelines. Studies were included from the January 2017 till July 2022. Two databases (PubMed and MDPI) were used for conducting this review. 2 studies focused on customized health care services. 3 studies focused on importance of interventions in exercise. 3 studies focused on how improvements in wheelchair control mechanisms affected their lives. 4 studies focused on the use of technology to address their needs and their accessibility to better services. 1 study focused on genetic testing of disabled. 1 study focused on ontology model for the rescue of LTC residents. Quality of life of disabled people can be improved by taking multiple steps such as increasing their leisure activities, interventions in exercise, increased access to the disabled and tailored health services according to their individual needs.

Aims:

1. Determining the quality of life of differently abled population.
2. Reviewing the literature related to the quality of life in differently abled population and highlighting the need for improving their lifestyle.

Introduction:

Disability term includes impairments, activity limitations and participation restrictions. Disabled people experience various barriers due to restriction of participation and their lives are affected with poor health outcomes, low education, lack of social and economic participation, higher rates of poverty and increased dependency. GBD 2004 data analysis showed that 15.3% of the world population (approximately 978 million people) had moderate disability, while around 2.9% population (185 million people) experienced severe disabilities. This study attempts to evaluate and present a systemic review of the literature work already present to understand the QOL and other associated concerns among younger as well as the older population. A systematic review is a summary of all of the literature on a particular topic, that meets pre-defined eligibility criteria.

Methods:

The review was conducted according to the PRISMA 2020 guidelines. Following Databases were used: Pubmed and MDPI from January 2017 to July 2022. No filter in terms of study design, language, country of publication, etc. were used in order to retrieve all the available literature.

Inclusion Criteria: Original articles, studies conducted in 2022.

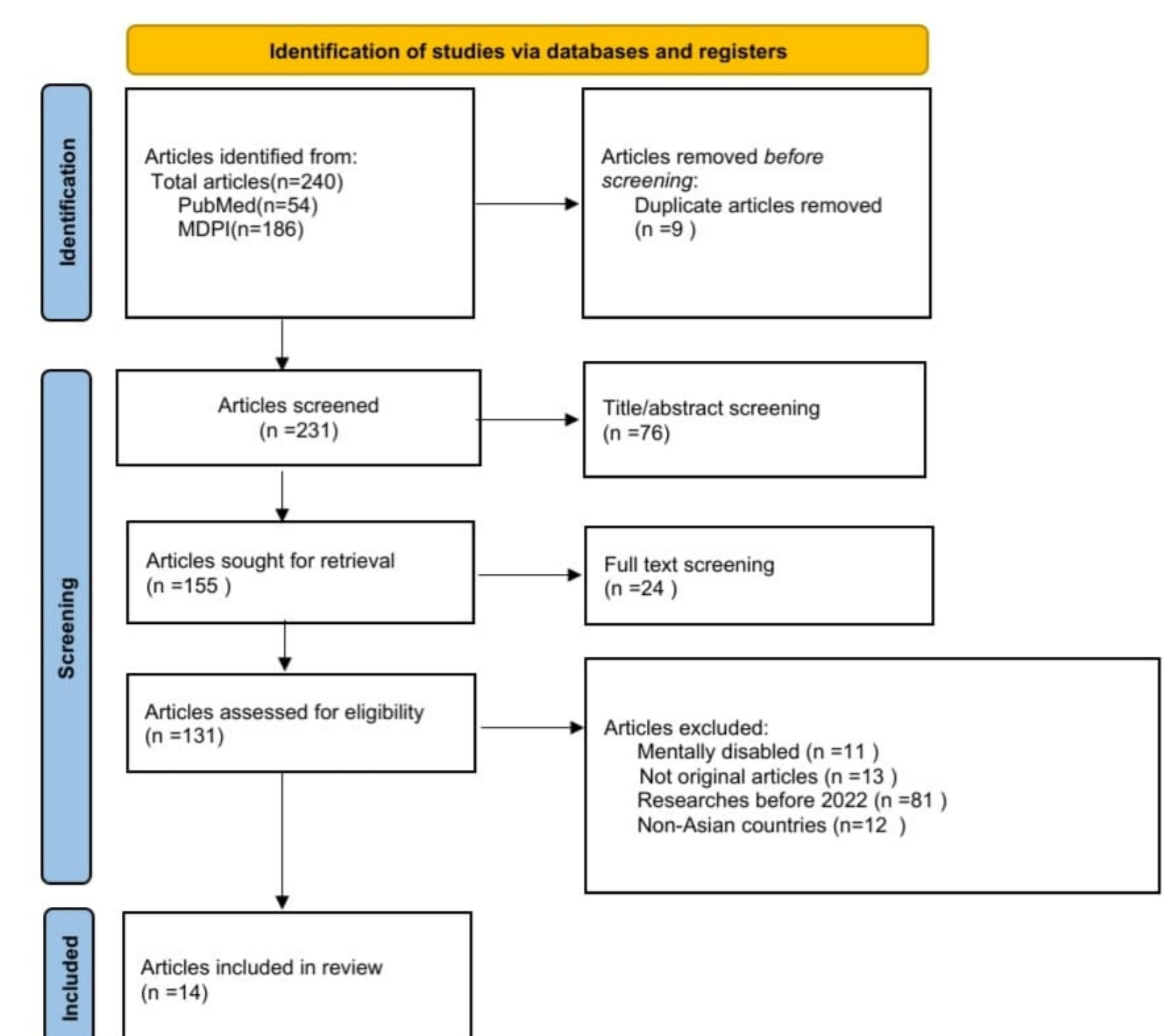
Exclusion Criteria: Non original studies, non asian countries, research before 2022, mentally disabled population.

Keywords: differently abled , disability, quality of life.

Results:

Total of 240 articles were screened out of which only 14 met our inclusion criteria. Identified studies were uploaded in Mendeley Library and duplicates were removed. A total of 231 articles obtained after removal of duplicates were screened. After title and abstract screening 155 articles were left. After full text screening, we were left with 131 articles. On applying exclusion criteria, 14 articles met the inclusion criteria and were used for data extraction.

PRISMA 2020 flow diagram for new systematic reviews which included searches of databases and registers only



Sr. no.	Author	Year of Publication	Sample Population	Country	Improving the quality of life by
1	Aly A et al	2022	General population with disabilities	Saudi Arabia	The fuzzy rules augmented position tracking control of upper Limb exoskeleton robot system
2	Bang G et al	2022	General population with developmental disorders	Korea	Sub siding the cost of genetic testing and on eliminating the stigma surrounding disabilities
3	Chowdhury S et al	2022	General population with disabilities	Bangladesh and Liberia	ensuring the accessibility of information, services
4	Gaoubuni S et al	2022	General population with severe motor disability	Saudi Arabia	The BCI technology
5	Kim T et al	2022	Disabled population on their HRQOL	Korea	Physical activity and health related factors
6	Liu C et al	2022	General population with disabilities	China	Customized preventive care and support services
7	Ngo B et al	2022	General population with disabilities	Vietnam	proposed optimal path trajectory and the semi-automatic control
8	Park E	2022	General population with and without disabilities	South Korea	Developing the Technologies to address the diverse needs of physically disabled people
9	Siribunyang N et al	2022	General population with disabilities	Thailand	The SSVEP stimulus via QR code pattern
10	Song Y et al	2022	Old age population with and without disabilities	Korea	Customized health care services
11	Wang R et al	2022	Old age population with disabilities	Taiwan	A BIM-based ontology model for fire rescue operations
12	You J et al	2022	Old age population with cerebral palsy	Korea	interventions in daily life activities
13	Zahra A et al	2022	General population with and without physical disabilities	Saudi Arabia	Improving the environmental QoL
14	Zou Y et al	2022	Old age population with disabilities	China	The prewarning of defecation

Discussion:

Problem: Not being self dependent:

Solutions:

- Semi-control method of an electric wheelchair along with an RGB-D camera system.
- Brain-computer interface (BCI) technology.

Problem: Lack Of Medical Attention:

Solutions:

- Policy of reduced medical costs and increased accessibility of genetic testing.
- Increasing the frequency of physical activity of the disabled.
- Customized health care services

Problem: Not being a part of Planning and Implementing Policies:

Solution:

- Participation as agents of planning and implementing policies.
- Accessibility of information and services

Problem: No access to basic facilities of life:

Solutions:

- Providing elevators, side rails, and special toilets.
- Construction of walkways, parks, gyms, and fitness clubs.

Strength:

- Rigorous methodology.
- Carefully developed and comprehensive search strategy.

Limitations:

- Consideration of external disturbance and input saturation.
- Generalizing the results of genetic testing.
- Adoption of inclusive policies keeping in view gender, age and cultural factors.
- Development systems which give the user a wider control and a more independent environment.
- Ways to reduce the socio economic burden in health services.

Conclusion:

Quality of life of disabled can be improved by:

- Increasing their leisure activities
- Interventions in exercise
- Increasing access to the disabled and tailored health services
- SSVEP powered wheelchair control mechanism
- Adoption of pre-warning methods to cater to their needs.



REFERENCES:

1. Byra S, Parchomiuk M. Courtesy stigma and self-concept in partners of individuals with a physical disability. Men Disability Society. 2017;2(36):25-42.
2. Hylkema T, Brouwer S, Stewart R, van Beveren J, Rijk P, Brouwer R, et al. Two-year recovery courses of physical and mental impairments, activity limitations, and participation restrictions after total knee arthroplasty among working-age patients. Disability and Rehabilitation. 2020;44(2):291-300.
3. Grossman B. Barriers to Cross-state Movement for Disabled People and Their Families: A Social Problem. Disability Studies Quarterly. 2018; 38(2):1-11.
4. Jadhav* R, Chordia T, Shrivastava Y, Singh S, Thorat U. Two Way Communication for the Differently Abled. International Journal of Innovative Technology and Exploring Engineering. 2020;9(6):2032-2035.
5. Zaheer A, Malik A, Masood T, Fatima S. Effects of phantom exercises on pain, mobility, and quality of life among lower limb amputees; a randomized controlled trial. BMC Neurology. 2021;21(1):1-8.
6. Ashraf S, Haider G, Ashraf M. Violence against Women with Disabilities: A Qualitative Investigation. Annals of King Edward Medical University. 2018; 23(4):540-545.