Global Journal of Medicine & Public Health

Laws, Policies, and Evidence on the Quality of Life of Senior Citizens in Kathmandu Metropolitan City

Kripa Sigdel[1], Sujan Shrestha[2]; Sunita Pandey[1]*

ABSTRACT

Introduction

The global aging trend is accelerating, making the quality of life (QoL) among elderly populations a critical concern. Understanding the physical, social, psychological, and environmental dimensions of QoL is essential, particularly as life expectancy increases. This study examines the QoL of senior citizens in Kathmandu Metropolitan City and evaluates the legal frameworks and policies that shape their well-being.

Methods

A quantitative, cross-sectional research design was employed alongside document review. A total of 206 elderly participants from Ward Nos. 9 and 12 of Kathmandu Metropolitan City were surveyed using standardized QoL assessment tools. Additionally, relevant laws, policies, directives, and programs concerning senior citizens were systematically reviewed.

Results

The findings indicate that most senior citizens in the sample reported good QoL. However, 14–18% of participants exhibited poor QoL across Physical Health, Psychological Well-being, Social Relationships, and Environment domains. Key predictors of QoL included gender, age, educational attainment, and existing health conditions. Significant positive correlations were observed among the four QoL domains, overall QoL, and health satisfaction.

Conclusion

While Kathmandu Metropolitan City has demonstrated a commitment to elderly welfare through policy frameworks, notable gaps persist. Strengthening qualitative approaches, adopting a well-being-centered framework, and enhancing geriatric healthcare capacity are crucial for improving senior citizens' QoL.

Keywords: Aging, Senior Citizens, Quality of Life, Kathmandu Metropolitan City

GJMEDPH 2025; Vol. 14, issue 3 | OPEN ACCESS

1*Corresponding author: Kripa Sigdel , Sunita Pandey, Tribhuvan University,Kripa Sigdel Email: kripa@possiblehealth.org Phone: 9849812135; 2.Sujan Shrestha, University College London.

Conflict of Interest—none | Funding—"Mayor's Research Fellowship Grant, City Planning Commission, Kathmandu, Metropolitan city"

INTRODUCTION

The World Health Organization's Quality of Life (WHOQOL) defines quality of life (QoL) as "an individual's perception of their position in life, in the context of the culture and value systems in which they live, in relation to their goals, expectations, standards, and concerns." This concept encompasses all aspects of physical and psychological health, social interactions, and relationships with the surrounding environment. According to the United Nations (2019), the global population aged 65 years or older was 703 million in 2019, with projections indicating it will double to 1.5 billion by 2050. Nepal is experiencing this demographic shift as well. The Nepali Senior Citizens Act defines senior citizens as individuals aged 60 years and above. In 2011, they constituted 2. 1 million people (CBS, 2012). The pace of aging is accelerating, making it a global concern. Understanding the various dimensions of QoL—including physical, social, psychological, and environmental factors—is crucial, particularly as longevity continues to increase. QoL provides insight into perceived physical and psychological health while also reflecting social life and environmental factors such as economic stability, home environment, and healthcare access—all of which affect the lives of senior citizens. The Constitution of Nepal mandates the provision of essential healthcare services free of cost to ultra-poor, vulnerable populations, senior citizens, individuals with physical and psychological disabilities, and women. While Nepal has developed various policies and programs to expand healthcare services, the government faces resource constraints that hinder its ability to address the psychosocial needs of senior citizens. In this context, evaluating the implications of national policies and laws on senior citizens' QoL is essential, as this may highlight gaps in existing frameworks. Identifying these gaps underscores the need to systematically assess the level of QoL among senior citizens in Nepal.

Objectives

The objectives of this research are to:

- Assess the quality of life of senior citizens.
- Examine the correlation between physical, social, psychological, and environmental predictors of QoL.
- Analyze the effects of gender, age, education, and health conditions on senior citizens' QoL.

2. Methodology

This research primarily adopted a quantitative, cross-sectional design alongside a text review of laws, policies, directives, and programs impacting the quality of life (QoL) of senior citizens. Purposive sampling was employed to ensure the inclusion of participants meeting specific criteria aligned with the research objectives, namely, senior citizens residing in Ward Nos. 9 and 12 of Kathmandu Metropolitan City. This non-probability sampling technique is widely used in social and health sciences when researchers seek insights from targeted subgroups with specific characteristics or experiences (Etikan, Musa, & Alkassim, 2016).

The study focused on individuals aged 60 years and above, whose QoL was assessed using the WHOQOL-BREF instrument in the Nepali context. Data collection involved 206 participants, selected based on estimates of senior citizens residing in the two wards, logistical feasibility, and alignment with similar studies in the field. While formal power calculations and probability sampling were not employed due to the purposive design, the sample size was deemed sufficient to capture diverse perspectives and meaningful trends in QoL.

Additionally, desk research was conducted to systematically review and analyze legal documents, policies, programs, and directives related to senior citizens' QoL. This process involved searching, compiling, evaluating, and interpreting key legal texts to assess their scope and limitations.

The study adhered to ethical standards and protocols, ensuring informed consent, confidentiality, the right to withdraw, and protection from harm. The scoring of participants in WHOQOL-BREF followed the structured five-point Likert scale (1 to 5). Raw domain scores were summed and transformed into a 0-100 scale per the WHOQOL-BREF manual (World Health Organization, 1996), enabling standardization and comparability across QoL domains.

Legal documents were systematically analyzed to assess their scope and limitations regarding QoL. The policies and programs of Kathmandu Metropolitan City were further examined within the broader national and international policy framework, ensuring alignment with globally recognized QoL indicators.

3. Results and Discussion

This study aimed to evaluate the QoL of senior citizens and analyze legal documents and policies affecting their well-being in Kathmandu Metropolitan City. Findings revealed that most senior citizens reported a good QoL based on their subjective evaluations. However, 14–18% of participants exhibited poor QoL across Physical Health, Psychological Well-being, Social Relationships, and Environmental domains. A significant portion of senior citizens allocated most of their allowance toward food, medicine, and healthcare expenses. Overall QoL, health satisfaction, and all four QoL domains demonstrated significant positive correlations, highlighting their interconnected nature. Female, older, and illiterate senior citizens exhibited lower QoL compared to male, younger, and literate counterparts.

Policy Analysis

The textual analysis of legal documents and policies revealed that Kathmandu Metropolitan City has developed notable policies and programs to address senior citizens' needs. However, several gaps remain:

- Policies were predominantly distribution-oriented, prioritizing quantity over quality.
- The existing frameworks primarily focused on managing senior citizens, rather than actively engaging them in cultural, economic, political, and social domains.
- Healthcare services were intervention-focused, with limited emphasis on preventive and promotional measures.

3. 1. Insights from Demographic Characteristics

Table 1: Demographic characteristics of the participants

Characteristics	N	%
Gender		
Male	97	47.1
Female	109	52.9
Age		
60 – 74	116	56.3
75 and above	90	43.7
Marital Status		
Unmarried	2	1
Married	141	68.4
Widow/widower	61	29.6
Divorced	2	1
Living Arrangement		
With Children (3 generations)	130	63.4
With Children (2 generation)	38	18.5
Husband/wife only	24	11.7
Alone	5	2.4
Old Age Home	8	3.9
Ethnicity		
Dalit	11	5.4
Janajati	103	50.5
Brahmin / Kshetry	80	39.2
Others	8	3.9
Education Status		

Literate	126	61.2
Illiterate	80	38.8
Educational Level		
General Literacy	43	34.4
Primary Education	22`	17.6
Secondary Education	14	11.2
Higher Secondary Education	13	10.4
University Education	33	26.4

Note: N denotes the number of participants; % denotes the percentage of the participants.

The gender ratio of the participants was more or less similar (97 and 109). The ages of the participants also varied and ranged from 60 to 94 years of age. The demographic characteristics have some important insights. The collectivistic value of society has been reflected in the lives of the senior citizens of the participants were still found to be living with 3 family members. These findings align with Chalise (2012), who reported similar living arrangements. This showed that the care of the senior citizens has been delegated to the other members of the family. Family, rather than the state, is the major reliable source of care and support for senior citizens. The government, both central and local, has to realize this demographic reality, as this can be a great opportunity for the government as well. Instead of focusing on an individual, the policy has to be made that recognizes the family's special role and helps them with enough information and support to take care of their older relatives and also to maintain their quality of life as well (National Academies of Sciences, 2016). Policies and programs should assess the capacity of family caregivers to care for elderly family members (ie, senior citizens). They should also support these caregivers by providing information, incentives, facilities, training, and other necessary resources. At the same time, the family caregiver's quality of life deserves mention in the policies and programs.

3. 2. Expenditure Pattern

Table 2: The participants' expenditure from the allowance provided by the central and local government

	1*	2*	3*	Participants are eligible for the allowance with valid responses
Food	68	48	2	
Medicine & Treatment	59	49	5	
Family Expenses	3	11	24	160
Saving	12	0	1	

*Note: *1, 2* and 3* signify the order of the expenditure from the highest expenditure to the lowest expenditure.*

The nature of the expenditure by senior citizens can have policy implications. The majority of the participants spent most of their senior allowance money on procuring food, medicine, and health care facilities. The investment in health care facilities has been a major focus of Kathmandu Metropolitan City. This, when combined with social allowance schemes, works effectively as they complement each other. The bigger proportion of expenditure on health care also requires and suggests more subsidies and affordable access to the health care system.

3. 3. Quality of Life of Senior Citizens

Table 3: Mean and SD in the four domains of Quality of Life and participants with poor scores (N =206)

	Mean	SD	Number of participants with poor scores [a]
Physical Health QOL	60.92	19.53	39 (18.9%)
Psychological QOL	67.37	17.01	37(18 %)
Social Relationship QOL	66.94	13.53	29 (14.07%)
Environmental QOL	70.82	12.63	30 (14.56%)

Note: mean < 1 SD

The research found that more than two-thirds of the participants evaluated their overall quality of life to be good. In domain-wise also, around 14-18.9% of the participants scored lower than the cut-off standard (i.e., one SD below the calculated mean), which indicated a relatively poor score. The result is similar to that of Wong, Yang, Yuen, Chang, and Wong (2018) and D'mello and Devraj(2019). Among the domain scores, the environmental domain had the highest mean score of 70.82 (SD=12.63) and the lowest in the Physical Health domain with the mean score of 60. 92 (SD= 19.53). The results are quite contradictory to the results of Onunkwor et.al (2016). The majority of the participants had health problems, which can be attributed to the relatively lower quality of life in the Physical Health domain. The highest mean score in the Environmental domain can be due to the collectivistic family values and can be the effects of the policy and programmes which directly impact the environmental domain of QoL.18.9% of the participants reported poor Physical Health QoL, followed by 18% of the participants who reported poor Psychological QoL. These figures indicate the need for targeted policies and interventions from Kathmandu Metropolitan City to enhance the physical and psychological well-being of senior citizens.

3. 4. Association between the four domains of QoL, Overall QoL, and Health Satisfaction

Table 4: Correlation coefficient between the four domains of QOL, Overall QOL, and Health Satisfaction (N= 206)

	Physical Health QOL	Psychological QOL	Social Relationship QOL	Environmental QOL
Physical Health QOL	1	.783**	.489**	.623**
Psychological QOL	.783**	1	.579**	.731**
Social Relationship QOL	.489**	.579**	1	.549**
Environmental QOL	.623**	.731**	.549**	1

Note: ** p <0. 01

The research has shown significant positive correlations between and with all the domains of QoL, overall QoL, and Health Satisfaction. The correlation strength varied from moderate (r = 0.48) to strong (r= 0. 78) (Ratner, 2009). The significant result signifies that the relationship is valid in the population. The positive correlations in all the areas and domains of QoL suggest that the domains are interrelated with each other, and the subjective experience in a domain has an influence on other domains of Quality of Life. The positive interrelationship between the domains of quality of life has significant implications for senior citizens in Kathmandu Metropolitan City. Notably, there is a strong association between physical health and psychological quality of life (QoL), indicating that better physical health contributes to greater psychological —and vice versa (Dale, Brassington, & King, 2014; De Neve, Diener, Tay, & Xuereb, 2013). Empirical evidence also shows that increased physical activity improves well-being, particularly among older adults (Craft & Perna, 2004; Department of Health, 2014). Furthermore, psychological well-being is strongly linked with better physical health outcomes, including reduced inflammation, improved cardiovascular function, and enhanced immune and endocrine responses, which ultimately contribute to increased longevity and reduced risk of chronic illnesses (Trudel-Fitzgerald et al., 2019). These findings suggest important policy implications for Kathmandu Metropolitan City. The local government can develop targeted programs to promote physical activity among the least active senior citizens by organizing structured exercise initiatives in parks and community centers. Additionally, to improve psychological well-being, policies could address loneliness and social isolation among the elderly. One effective approach could be the provision of accessible geriatric psychosocial counseling. For instance, the "Silver Line" initiative in the UK, which offers a 24-hour confidential helpline for older adults, has reported that 70% of users experienced increased happiness and feelings of connectedness. A similar program could be adapted for Kathmandu's ageing population to enhance both psychological and physical well-being.

Similarly, there's a strong positive correlation between environmental QoL and psychological QoL. Housing improvements and refurbishment have been linked with improved physical and mental health (Thomson, Petticrew, & Morrison, 2001). Guite, Clark, and Ackrill (2006) found out the associations between the physical environment (neighbor noise, sense of overcrowding in the home, escape facilities such as green space and community facilities, and fear of crime) and mental health. When doing urban planning, the research implies that there is a need to intervene on both design and social features of residential areas to promote mental well-being. Likewise, there is a moderate association of social relationship QoL with Physical health QoL and Psychological QoL. Older people with a strong attachment to the local area and social networks were found to have higher resilience (Cooke et. al., 2011). Similarly, access to health care facilities and controlling pollution enhances people's mental health.

3. 5. Socio-demographic and Health Predictors of Quality of Life

Table 5: The mean differences in Overall QoL, Health Satisfaction, and four domains of QoL based on demographic characteristics – gender, age, education level, and health problems

Variable	Domains					
	Overall QOL	Health Satisfaction	Physical Health	Psychological	Social Relationship	Environmental
Gender						

Male	3.76 ± 0.70	3.70 ± 0.90	64.51 ± 19.8	69.97 ± 16.59	69.32 ± 13.29	72.69 ± 12.59
Female	3.72 ± 0.66	3.39 ± 0.89	57.72 ± 18.8	64.81 ± 13.44	64.81 ± 13.44	69.16 ± 12.50
P Value	0.690	0.015	0.012	0.038	0.016	0.045
Age						
60-74	3.73± 0.71	3.58 ± 0.90	63.88 ± 19.67	69.5 ± 17.44	69.62 ± 13.97	71.30 ± 13.13
75-94	3.76 ± 0.64	3.49 ± 0.91	57.1 ± 18.76	64.63 ± 16.11	63.48 ± 12.16	70.21 ± 12.01
P Value	0.813	0.488	0.013	0.041	0.001	0.540
Education Status						
Literate	3.81 ± 0.70	3.70 ± 0.88	64.81 ± 18.25	70.8 ± 16.04	69.65 ± 13.93	73.51 ± 12.31
Illiterate	3.64 ± 0.64	3.29 ± 0.88	54.78 ± 20.01	61.98 ± 17.18	62.66 ± 12.61	66.58 ± 12.03
P Value	0.078	0.001	0.000	0.000	0.000	0.000
Health Problems						
With Health Problems	3.64 ± 0.66	3.35 ± 0.87	56.69 ± 18..76	64.51 ± 16.56	65.70 ± 13.47	69.61 ± 12.93
Without Health Problems	4.11 ± 0.61	4.23 ± 0.67	76.5 ± 13.6	77.93 ± 14.41	71..47 ± 12.88	75.27 ± 10.44
P Value	0.000	0.000	0.031	0.000	0.012	0.008

The research has found that male participants had significantly higher scores in health satisfaction, physical health domains, psychological domain, social relationship domain, and environmental domain. The research findings are similar to the findings of Adhikari et al.(2018), Bilgill and Arpaci (2014), Lee et al. (2006), and GC (2017). It can be attributed to the lower status of women in our society and the patriarchal mindset of society. Women senior citizens should be given more attention and preference in framing policies and programs. The participants with older age or the age group of 75 years and above had significantly lower quality of life in physical health, psychological, and social relationship domains of QoL than the participants of the age group 60-74. The similar findings were reported by Adhikari et. al (2017), GC(2017), and Bhandari et. al.(2016). This can be due to deteriorating health conditions due to increasing age. This can also be justified with results, which have shown that the participants reporting health problems had significantly lower quality of life in all the domains of QoL, overall QoL, and Health Satisfaction than the participants with no health problems.

Illiterate participants had significantly lower quality of life in all four domains of QoL and Health Satisfaction than the literate participants. This has demonstrated that education is an important predictor of Quality of Life. Similar results have been reported by Gobbens and Remmen (2019), Adhikari et al.(2018), and Joshi et al.(2018). With education, one has more access to information and is more aware of the issues and situations, facilities, and opportunities provided by the government and different agencies. The education would help the senior citizen to adapt to the changing conditions and uplift the quality of life by increasing the sense of agency in the areas of physical, psychological, and social relationships (Boulton, 2010).

Gender, age, presence of health problems, and education stood out as the predictors of quality of

life. Kathmandu Metropolitan can use this knowledge to bring special provision to female senior citizen, senior citizens of age 75 years and above, chronically ill senior citizens and illiterate senior citizens to compensate for the relatively lower quality of life, to uplift their quality of life and make the services and programs equitable across all the sections of population. The results also implicate the need to bring plans and programs focused on gender (female senior citizens), age (75 years and above), health (chronically ill senior citizens), and education (illiterate senior citizens).

3. 6. Gaps in the laws and policies

Here we present the possible gaps in local-level laws and policies to align them with the international conventions and best practices to achieve a higher level of quality of life. The gaps identified focus on policy orientation and perspective shifts, rather than an evaluation of implementation or budgetary allocation.

Focus on qualitative aspect of the care

As recommended by the Vienna International Plan of Action on Ageing (1982), policies and programs should integrate both qualitative and quantitative aspects to ensure that senior citizens lead meaningful and dignified lives until the end of their lives. In this regard, the Metropolitan's policies and programs appear predominantly distribution-oriented, emphasizing free services and the distribution of social security and allowances. While such provisions are essential and should continue, they must be balanced with initiatives that recognize older adults' expertise and capabilities, fostering their active engagement in society.

For instance, policies can be designed to encourage:

- Cultural and social participation through community involvement, intergenerational programs, and engagement in cultural, religious, and spiritual activities.
- Economic participation, enabling part-time or flexible work opportunities that leverage seniors' skills and experience.
- Lifelong learning incorporates both formal and informal educational initiatives to support cognitive health and personal growth.
- Mental well-being and leisure, through retreats, recreational travel, and psychosocial support, all contribute to an enriched quality of life for senior citizens.

Health Policies: From Intervention to Promotion

The Metropolitan's healthcare policies and programs primarily focus on interventions rather than health promotion. To ensure a well-being-oriented approach, policies should incorporate preventive and health-promoting programs for senior citizens.

For example, policies should emphasize physical activity promotion, including light exercise, walking, and jogging, to support healthy aging. A crucial component of well-being is psychosocial health, as psychological and emotional challenges often arise during this life stage (World Health Organization, 2017).

To enhance psychosocial well-being, initiatives should include:

- Mental health awareness and resilience-building programs.
- Emotion management and expression interventions.
- Safe spaces and opportunities for senior citizens to share their feelings and receive empathetic support, as evidenced in the research by Chao et al. (2016).

Geriatric Care Capacity Building

The Metropolitan's policies lack provisions for geriatric care capacity-building among healthcare professionals. To address this gap, a long-term strategy should be developed to equip health professionals with specialized skills in geriatric care. Policymakers can introduce training programs and resource mobilization efforts to ensure effective senior healthcare services.

3. 7. The Implication of Policy Analysis

The policy of Kathmandu Metropolitan regarding senior citizens has several important provisions that have conducive effects on the quality of life. Notably, senior citizens have been given emphasis and space in the policy. However, the policy also has room for improvement.

The gaps found by the textual analysis of the several international, national, and local legal documents will have far-reaching implications if incorporated into the policy. One of the important implications

will be the shift in the perception. The senior citizens are generally perceived as passive and demanding lots of care and assistance. This kind of perception devalues the contributions and individuality of the senior citizen and also encourages the tendency to view them as burdens (Levy, 2009). If we consider the senior citizens as someone productive and a repository of knowledge and wisdom that can be utilized and exploited, the senior citizens and the elderly will not be left out in the community engagement and participation in different social and community activities. The policy implication of this is that the senior citizens need to be included in the policy formulation and decision-making process. Their knowledge, experiences, attitudes, and perceptions should be accounted for and utilized while making policies and programs for them. At the same time, policies and programmes should balance qualitative engagement with quantitative resource distribution. The distribution-oriented programs should be balanced with the formulation of policies that utilize the expertise and skills of the senior citizens and provide more opportunities for community engagement and participation in cultural, economic, political, and social life. The examples of such programs can be the opportunities for retreat and travel, enhancing the learning through formal and informal learning, community engagement works, part-time work, religious and spiritual activities, etc.

As evidenced by the findings of the current study and other studies, health condition is a great predictor of quality of life; the policy should give special priority and focus on this. While doing this, two policy gaps need to be addressed. The current policy is almost singularly focused in intervention and treatment of health conditions, which is expensive and burdens the Metropolitan. Along with this, the Metropolitan should bring a policy that focuses as much on the 'wellbeing' aspect as 'disease treatment'. Hence, the plans and programs that focus on the overall well-being, including psychosocial well-being, should be introduced. The other gap is in the manpower of geriatric care. It is in the best interest of the Metropolitan to prepare and enhance the capacity among the health professionals regarding geriatric care.

4. Policy Recommendations:

Based on the empirical evidence from this research and the gaps identified in current policies, the following recommendations are suggested for the concerned authorities of Kathmandu Metropolitan:

Since a majority of participants still live in three-generation family households, it is essential to develop policies and programs that assess family caregivers' capacity to care for their elderly relatives (i.e, senior citizens). These policies should support caregivers by providing relevant information, incentives, facilities, and training. At the same time, the well-being and quality of life of family caregivers themselves deserve to be included within the scope of these policies. Given that a significant proportion of senior citizens' allowance expenditure is spent on healthcare, Kathmandu Metropolitan should focus on subsidizing healthcare treatments and improving affordable access to the healthcare system for senior citizens. Although participants reported good overall quality of life (QoL), they scored relatively lower in the physical health and psychological domains. Therefore, targeted policies and programs focusing on promoting physical health and psychological well-being need to be designed and implemented. These programs should include promotional, preventive, and interventional components. The strong association between physical health and psychological QoL has wider policy implications. For instance, Kathmandu Metropolitan could develop initiatives aimed at increasing physical activity among the least active senior citizens, such as exercise programs in public spaces like parks and community centers. Additionally, programs that reduce loneliness and promote social connectedness and empathetic understanding of seniors' concerns are necessary. Access to geriatric psychosocial counseling could be a valuable service to alleviate distress and improve psychological well-being. There is also a strong positive correlation between environmental QoL and psychological QoL. Urban planning should therefore address both the design and social features of residential areas, such as reducing neighborhood noise, alleviating overcrowding, and improving access to green spaces and community resources. These interventions can promote mental well-being among senior citizens. The findings highlight the need for targeted provisions to address the lower quality of life observed among female seniors, those aged 75 and above, chronically ill, and

illiterate senior citizens. Policies and programs should specifically focus on these groups to promote equity and improve their quality of life. Gender-sensitive, age-specific, health-oriented, and education-focused initiatives are necessary to meet these diverse needs effectively.

Policies and programs should equally emphasize qualitative and quantitative aspects to ensure that senior citizens can lead meaningful and dignified lives until the end of life. Rather than viewing seniors as a passive or stagnant population, policies should recognize and utilize their expertise and skills, providing more opportunities for community engagement and participation in cultural, economic, political, and social life. Furthermore, the policy framework should be more wellbeing-oriented, prioritizing health promotion and psychosocial wellbeing alongside physical health. Finally, Kathmandu Metropolitan must develop a long-term strategy to build geriatric care capacity among healthcare professionals to meet the growing needs of its ageing population.

Acknowledgments

The Author would like to thank Mr. Saroj Basnet, Vice Chair, KMC City Planning Commission, Mr. Kirti Kusum Joshi, Ms. Gujeshwori Shrestha, Mr. Gunjan Khanal, Mr. Kapil Phuyal, Jayshree Rajbhandary, mentor Mr. Krishna Murari Gutam, and Mr. Sujan Shrestha for their constant support in the process with the feedback and insights. However, any errors in this article are solely the responsibility of the author. This study is also being funded by the City Planning Commission as the research grantee for the 'Mayor's Research Fund'.

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