

# Quality of Life in Arterial Hypertension Patients Treated with Fixed Combinations

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## Background

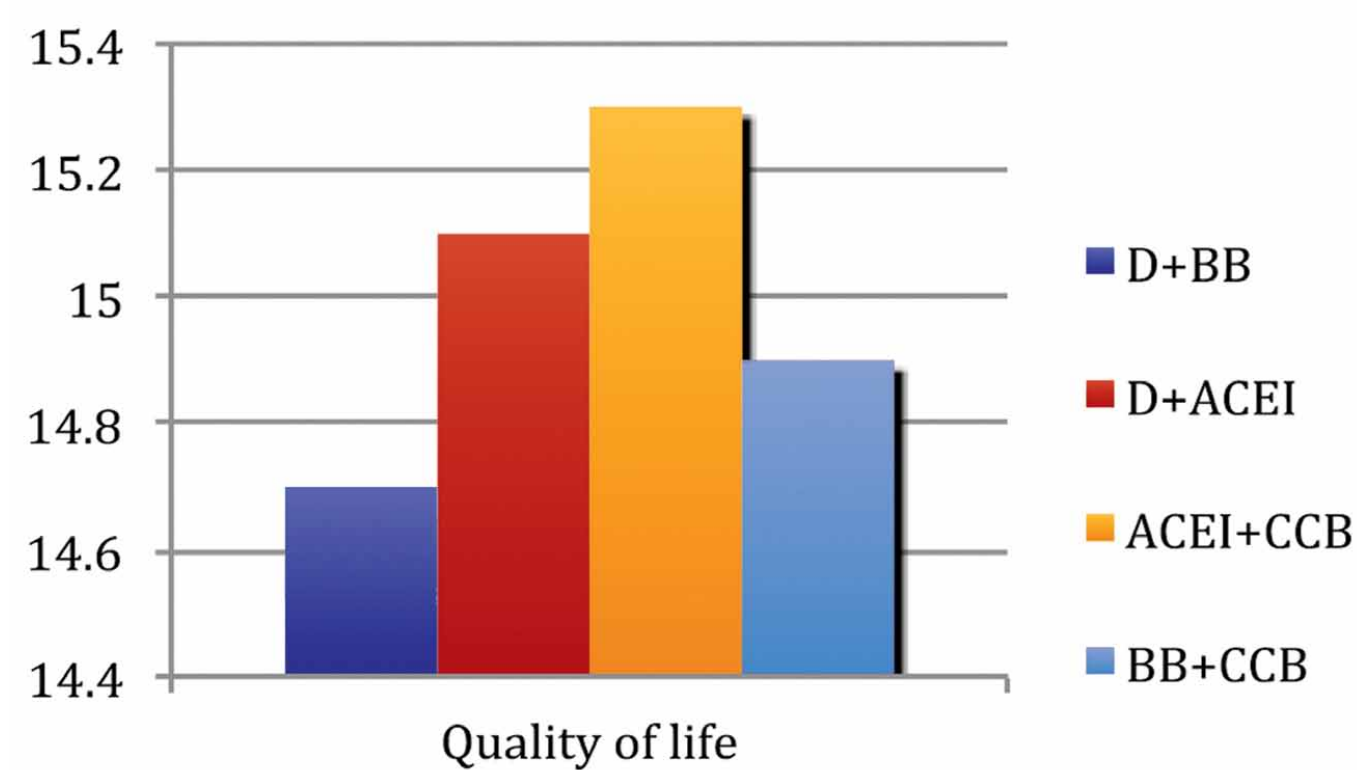
The effective control of arterial hypertension (AH) remains a topical problem despite a plenty antihypertensive preparations (AHP) applied today. Only 37 % of the AH patients in Europe are treated effectively. Patients often don't comply with the applied therapy due to bad tolerance (a lot of side effects) and insufficient efficacy. Uncomplicated mild and moderate AH appears to be asymptomatic, it doesn't worsen quality of life (QOL). Otherwise, undesirable side effects of AHP, even slightly expressed, influence QOL and cause refusal of constant preparation use. In this connection, QOL gets the value of one of the basic criteria of successful treatment.

## Methods

We studied 32 AH patients with different disease severity, consecutively recruited from the Internal Diseases Department of Stradiņš Hospital during December 2010–January 2011. QOL was estimated using **the Ferrans and Powers Quality of Life Index QLI Cardiac Version**. QOL overall and QOL in four domains were calculated. Possible range is from 0 to 30. Correlation analysis was applied to examine relationships between QOL and the treatment being received: 8 patients received a fixed combination of diuretics and BB, 8 patients received ACEI+diuretics, 8 patients received ACEI+CCB, and 8 patients received BB+CCB. Five scores were calculated for the Quality of Life Index: (1) Total quality of life score, (2) Health and functioning subscale score, (3) Social and economic subscale score, (4) Psychological/spiritual subscale score, and (5) Family subscale score. QOL was processed using SPSS 16.0.

## Objective

To assess quality of life (QOL) in AH patients treated with fixed combinations of beta-blockers (BB), calcium channel blockers (CCB), angiotensin converting enzyme inhibitors (ACEI), and diuretics.



### Quality of Life Index – Cardiac Version.

#### PART 1. HOW SATISFIED ARE YOU WITH:

1. Your health?	1	2	3	4	5	6
2. Your health care?	1	2	3	4	5	6
3. The amount of chest pain (angina) that you have?	1	2	3	4	5	6
4. Your ability to breathe without shortness of breath?	1	2	3	4	5	6
5. The amount of energy you have for everyday activities?	1	2	3	4	5	6
6. Your ability to take care of yourself without help?	1	2	3	4	5	6
7. The amount of control you have over your life?	1	2	3	4	5	6
8. Your chances of living as long as you would like?	1	2	3	4	5	6
9. Your family's health?	1	2	3	4	5	6
10. Your children?	1	2	3	4	5	6
11. Your family's happiness?	1	2	3	4	5	6
12. Your sex life?	1	2	3	4	5	6
13. Your spouse, lover, or partner?	1	2	3	4	5	6
14. Your friends?	1	2	3	4	5	6
15. The emotional support you get from your family?	1	2	3	4	5	6
16. The emotional support you get from people other than your family?	1	2	3	4	5	6
17. Your ability to take care of family responsibilities?	1	2	3	4	5	6
18. How useful you are to others?	1	2	3	4	5	6
19. The amount of worries in your life?	1	2	3	4	5	6
20. Your neighborhood?	1	2	3	4	5	6
21. Your home, apartment, or place where you live?	1	2	3	4	5	6
22. Your job (if employed)?	1	2	3	4	5	6
23. Not having a job (if unemployed, retired, or disabled)?	1	2	3	4	5	6
24. Your education?	1	2	3	4	5	6
25. How well you can take care of your financial needs?	1	2	3	4	5	6
26. The things you do for fun?	1	2	3	4	5	6
27. Your chances for a happy future?	1	2	3	4	5	6
28. Your peace of mind?	1	2	3	4	5	6
29. Your faith in God?	1	2	3	4	5	6
30. Your achievement of personal goals?	1	2	3	4	5	6
31. Your happiness in general?	1	2	3	4	5	6
32. Your life in general?	1	2	3	4	5	6
33. Your personal appearance?	1	2	3	4	5	6
34. Yourself in general?	1	2	3	4	5	6
35. The changes in your life that you have had to make because of your heart problem (for example, changes in diet, physical activity, and/or smoking?)	1	2	3	4	5	6

### Quality of Life Index – Cardiac Version.

#### PART 2. HOW IMPORTANT TO YOU IS:

1. Your health?	1	2	3	4	5	6
2. Your health care?	1	2	3	4	5	6
3. Having no chest pain (angina)?	1	2	3	4	5	6
4. Having no shortness of breath?	1	2	3	4	5	6
5. Having enough energy for everyday activities?	1	2	3	4	5	6
6. Taking care of yourself without help?	1	2	3	4	5	6
7. Having control over your life?	1	2	3	4	5	6
8. Living as long as you would like?	1	2	3	4	5	6
9. Your family's health?	1	2	3	4	5	6
10. Your children?	1	2	3	4	5	6
11. Your family's happiness?	1	2	3	4	5	6
12. Your sex life?	1	2	3	4	5	6
13. Your spouse, lover, or partner?	1	2	3	4	5	6
14. Your friends?	1	2	3	4	5	6
15. The emotional support you get from your family?	1	2	3	4	5	6
16. The emotional support you get from people other than your family?	1	2	3	4	5	6
17. Taking care of family responsibilities?	1	2	3	4	5	6
18. Being useful to others?	1	2	3	4	5	6
19. Having no worries?	1	2	3	4	5	6
20. Your neighborhood?	1	2	3	4	5	6
21. Your home, apartment, or place where you live?	1	2	3	4	5	6
22. Your job (if employed)?	1	2	3	4	5	6
23. Having a job (if unemployed, retired, or disabled)?	1	2	3	4	5	6
24. Your education?	1	2	3	4	5	6
25. Being able to take care of your financial needs?	1	2	3	4	5	6
26. Doing things for fun?	1	2	3	4	5	6
27. Having a happy future?	1	2	3	4	5	6
28. Peace of mind?	1	2	3	4	5	6
29. Your faith in God?	1	2	3	4	5	6
30. Achieving your personal goals?	1	2	3	4	5	6
31. Your happiness in general?	1	2	3	4	5	6
32. Being satisfied with life?	1	2	3	4	5	6
33. Your personal appearance?	1	2	3	4	5	6
34. Are you to yourself?	1	2	3	4	5	6
35. The changes in your life that you have had to make because of your heart problem (for example, changes in diet, physical activity, and/or smoking?)	1	2	3	4	5	6

## Results

Obtained data testify that the most sensitive QOL parameters in AH patients are social and economic, cognitive function, side effects of therapy, sexual function, social function and an estimation of own health. A more severe form of the disease was significantly associated with worse overall QOL of the tested AH patients ( $p < 0.01$ ). QOL was decreased in all groups. The mean overall score for the diuretics and BB group was 14.7, the mean score for the ACEI+diuretics group was 15.1, the ACEI+CCB group mean score was 15.3, and for the BB+CCB group – 14.9. The Cronbach alpha criterion in all the domains was more than 0,70.

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## Conclusion

Being treated with diuretics and BB, patients demonstrated the lowest QOL, but the ACEI+CCB group – the highest one. The choice of the treatment should encompass QOL, as the impairment of the latter is associated with the former. Disease severity was significantly related to QOL in AH patients. The parameter of QOL could be used as the basic one at comparing the methods of treatment and defining an optimal medical strategy. *No conflict of interest.*

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