

The Barbados National Registry for Chronic Non-communicable Disease (the BNR)

The BNR team has collected data on all stroke and acute myocardial infarction (MI) events occurring in Barbados since July 2008 (stroke) and July 2009 (acute MI). Here we present, for the first time in the Caribbean, an assessment of quality of life (QoL) following a cardiovascular disease (CVD) event.

Methods

Quality of life was assessed among people who had a CVD event registered with the BNR between 2010 and 2011, and who had survived for at least 1 year after that event. Comparison was made with a random selection of adult Barbadians ≥ 25 years who had participated in a national CVD risk factor survey. Data were collected by interview using a health-related QoL questionnaire (the EQ-5D; see technical footnote), measuring QoL in five domains: mobility, self-care, usual activities, pain/discomfort and anxiety/depression.

KEY TERMS

QALY: *Quality-adjusted life year; the measure of a state of health in which the benefits, in terms of length of life, are adjusted to reflect the quality of life, in which 1 QALY reflects 1 year lived in “perfect health”.*

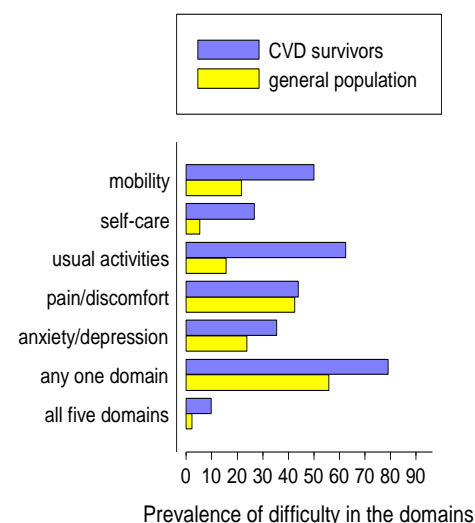
Results

QoL

Almost half of the Barbadian population (49%) were in “perfect health” (EQ-5D index score of 1; see technical footnote), vs 21% of CVD survivors. At least one health-related problem was reported by most CVD survivors (79%) vs half (51%) of the general population. CVD survivors had more problems with the physically active domains

(mobility, self-care and usual activities), particularly for stroke. Eleven per cent of CVD survivors had problems in all five domains, vs <1% of the adult population. More stroke (13%) than acute MI survivors (1%) had problems in all five domains.

Figure 1. Prevalence of difficulty experienced in each of the five QoL domains in CVD survivors (stroke and acute MI) vs the general population; Barbados, 2012.



Conclusions

In Barbados in 2011–12, QoL for 1-year CVD survivors (especially stroke; data not shown) was statistically significantly lower than for the general population, with the more physical domains (mobility, self-care, usual activities) being the main QoL limitations. Steps should be taken to improve health-related QoL in Barbadian CVD survivors. Future work will investigate use of stroke and cardiac rehabilitation services on CVD mortality, post-event mobility and access to rehabilitation. In particular the impact of the introduction of a stroke unit at the end of 2013 will be estimated. It is hoped that this information can be used, together with the cost estimates from a recent cost-of-illness study, in cost-effectiveness analyses of future interventions.

Technical footnote

The health-related QoL instrument used in this study was the EuroQoL-5D-3L (European QoL, 5-dimensions, 3-levels) questionnaire (adapted to Barbados). Of the five dimensions, or domains, three are physical (mobility, self-care, usual activities) and two non-physical (pain/discomfort, anxiety/depression). Each domain has three possible responses: “none”, “some” and “severe”.

For this assessment of QoL, first all “none” responses were re-coded as 0, while other responses all received a code of 1. This allowed us to estimate the prevalence of all responders with any difficulty in each of the domains (the proportion of those with a code of 1).

In addition, results from all domains were combined into a single EQ-5D index score, using a value set developed for Trinidad and Tobago. For Barbados, these calculated index scores ranged from -0.163 QALY (a health state considered to be “worse than dead”; in which for each domain, the response was “severe”) to 1 QALY (“perfect health”; in which for each domain, the response was “none”).

For more information See the Annual Reports for the BNR for the years 2009–2015 or contact the BNR Registrar Mrs Lauren Maul (see BNR contact details below right).

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