Background

Lung cancer, the leading cause of cancer-related death, is associated with poor survival, pain, life-threatening disease-related attributes; and an economic burden greater than other cancers.1,2 Non-small cell lung cancer (NSCLC), the most common type of lung cancer, presents multiple challenges for patients/caregivers, including increased distress, significant impact on social and health-related quality of life (HRQoL), and costs associated with loss of income and time spent on patient care.3

Caregivers for elderly patients with lung cancer are often children in the prime of their productivity to society.4

Methods

Study Design and Samples

Data were collected from the 2010 and 2011 EU National Health and Wellness Survey (NHWS), an annual, cross-sectional, Internet-based survey of self-reported healthcare attitudes and behaviors among adults.5

In 2010, data were collected from 12 countries for adults aged 26 and older: United Kingdom (UK), France, Germany, Italy, and Spain. The 2011 sample was increased to include additional countries: 11,986 in the United Kingdom (UK), France, Germany, Italy, Spain, the United States, and the Netherlands.

Respondents who reported being caregivers for an adult relative with lung cancer (“caregivers”) were compared with those who were not caregivers for a relative with any condition (“non-caregivers”).

Table 1 shows significant findings from multivariable regressions to predict health outcomes as a function of caregiving versus non-caregiving, controlling for demographics, behaviors among adults, and other personal characteristics.

Stress-related Comorbidities

- Adjusting for covariates, caregivers of lung cancer patients compared with non-caregivers reported significantly higher odds of living with depression, insomnia, headaches, and GI symptoms (Figure 2).

Work Productivity and Activity Impairment

- Adjusting for covariates, caregivers of lung cancer patients reported significantly higher mean-levels of presentation-related impairment, overall work impairment, and activity impairment during the last week (Figure 3).

Although Caregivers Work Productivity and Activity Impairment

- Adjusting for covariates, caregivers compared with non-caregivers reported significantly higher annual indirect costs associated with presentation-related impairment and overall work impairment (Figure 3).

Table 2 shows findings from multivariable regressions to predict health outcomes as a function of caregiving versus non-caregiving, controlling for demographics, behaviors among adults, and other personal characteristics.

Figure 3. Work productivity and activity impairment (%) with caregiving for patients with lung cancer

Figure 4. Adjusted odds of work productivity and activity impairment with caregiving for patients with lung cancer

Conclusions

Summary

- Caregivers for patients with lung cancer versus non-caregivers, reported significantly lower mental and physical health status, lower health utilities, higher stress-related comorbidities (depression, insomnia, headaches, and GI problems), impaired work productivity and activity, and higher indirect costs due to work productivity impairment

- Based on average age and employment status, it appears that children/caregivers of elderly lung patients have substantial reductions in productivity compared with non-caregivers.

- In spite of higher levels of morbidity, caregivers’ healthcare resource use was not higher than that of non-caregivers; the extent to which the excess morbidity of caregivers is addressed by appropriate healthcare resources requires further investigation.

- There is an apparent need for increased personalized support for caregivers for patients with lung cancer.

- Additional research on other aspects of caregiver burden, such as healthcare resource utilization and work productivity, will help refine estimation of the financial impact of lung cancer on society.

- Given the inevitable growing demand on informal care in cancer, consideration of the clinical impact of caregivers burden in clinical research, practice, and policy programs, as well as in the estimation of the value for money of new cancer therapies.

Limitations

- Use of retrospective, cross-sectional data, and an Internet-based sample of caregivers that may not be truly representative for the entire population.

- Lack of assessment of cancer status, history, and treatments.

Acknowledgment

- Writing and editorial assistance provided by Stephen Cervenka, backed by Bristol-Myers Squibb

References

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PCN63 Assessing the Burden of Caregiving for Patients With Lung Cancer in Europe

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Presented at the ISPOR 16th Annual European Congress, 2–6 November, 2013; Dublin, Ireland.

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