

10 The Impact of Glioblastoma Multiforme (GBM) on Functional and Work Status of Patients and Caregivers

Aaron Jenkins¹, Mike Aristides¹, Astra M. Liepa², Charlotte Relf³, Basil Feilding³

¹IMS Health, Health Economics and Outcomes Research, London, UK; ²Eli Lilly and Company, Indianapolis, USA; ³IMS Health, Sittingbourne, UK

ABSTRACT

Introduction: Although the symptom burden associated with GBM is considered substantial, little has been reported on the impact of GBM on patient's ability to perform activities of daily living (ADLs) and work status. Furthermore, even less has been reported in terms of the impact of GBM on caregiver's productivity.

Methods: Physicians who treat patients with brain tumors were asked to retrospectively record work status of adult patients and their caregivers over the course of treatment for GBM. Patients' abilities to perform ADLs were also recorded. ADLs were classified as household tasks (eg, cleaning, shopping, care of other family members) and self-care (eg, bathing, dressing, feeding).

Results: Retrospective case histories were provided by 56 physicians from five European countries for a total of 270 patients; 64% of patients were male and age ranged from <25 to >80 years old (79% were <66 years old). Work status information was available for 207 / 270 (77%) of cases; 141 / 207 (68%) were known to be employed before diagnosis. The majority of these previously employed were male (70%) and aged <56 years (70%). Of these 141 patients, 52% were no longer working due to GBM, 29% had reduced their work status due to GBM, and only 4% had no change in their work status. Household ADL information was available for 236 / 270 (87%) patients; 30% were able to perform household activities, 44% were able to perform only reduced activities, and 24% were unable to perform these activities. For patients unable to fully perform household activities, close family members provided support in 82% of cases. 68% of caregivers providing support for household activities had either reduced or ceased employment. Self-care ADL information was available for 238 / 270 (88%); 49% were able to perform self-care, 37% had reduced ability, and 13% were unable to perform these activities. When caregivers provided support for self-care, 74% had reduced or ceased employment. When comparing patients whose GBM had not recurred following initial therapy with those whose GBM had recurred, the impact on ability to perform ADLs was greater with recurrence, as was the impact on caregiver work status.

Conclusions: GBM reduces productivity of patients in terms of work status. GBM also reduces patient's abilities to perform ADLs. To assist with ADLs, family members and friends reduce work status. The negative impact of GBM increases with disease recurrence.

INTRODUCTION

- Although GBM is considered a debilitating disease, little has been reported on the impact of GBM on a patient's ability to perform activities of daily living (ADLs) and on work status
- Furthermore, even less has been reported in terms of the impact of GBM on caregiver's productivity
 - Sherwood et al (Res Nurs Health 2006) reported that 25% of caregivers assisted with ADLs and 45% with instrumental ADLs in patients with malignant brain tumors (44% GBM); these caregivers provided up to 30 hours of care per week

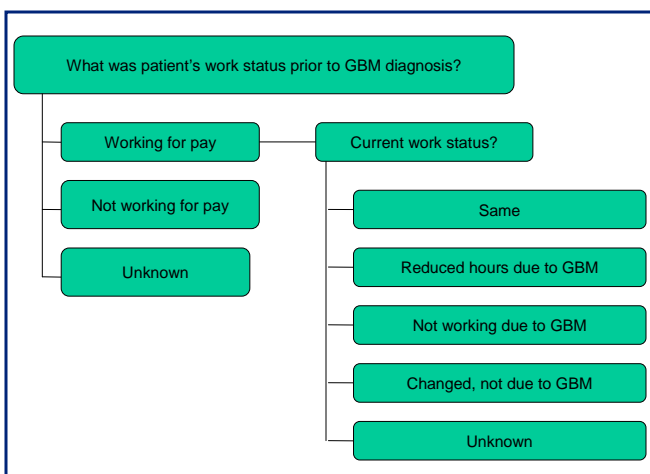
Objective

- To describe the impact of GBM diagnosis on work status and ADLs for patients and their caregivers

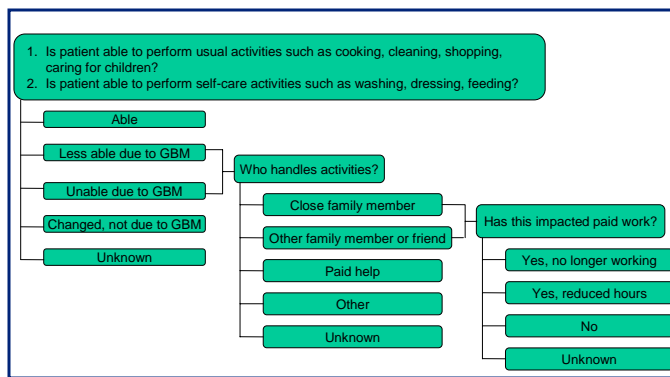
METHODS

- Physicians who treat patients with brain cancer provided retrospective case histories of adult patients with GBM
 - Patients were to be no longer receiving active therapy in order to provide maximum information about their case history
- In addition to clinical information, work status and ability to perform ADLs were documented
 - If available, ADL assistance by and work status for primary caregiver were also documented

Patient Work Status Questions



Household and Self-care ADL Questions



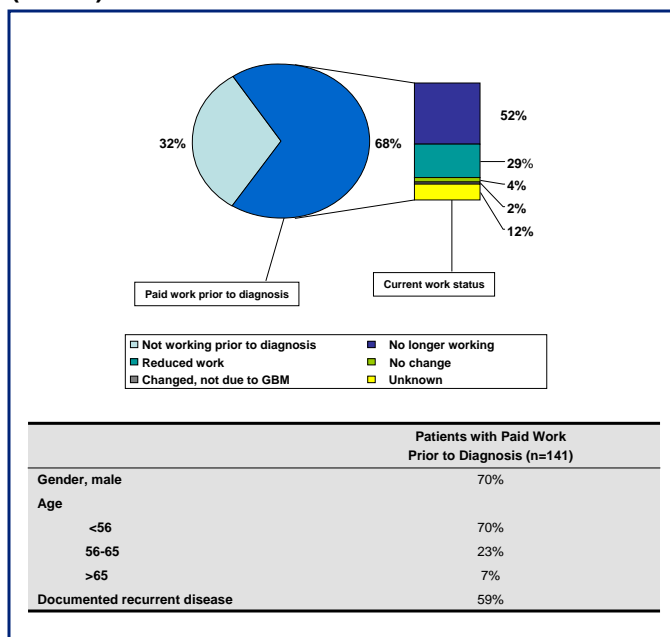
RESULTS

- 270 case histories provided by 56 physicians from 5 European countries.

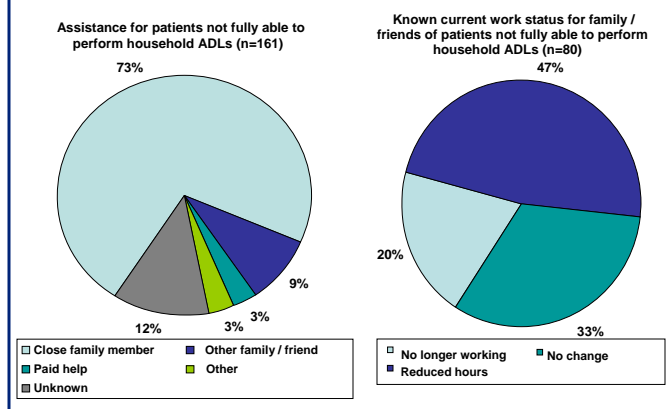
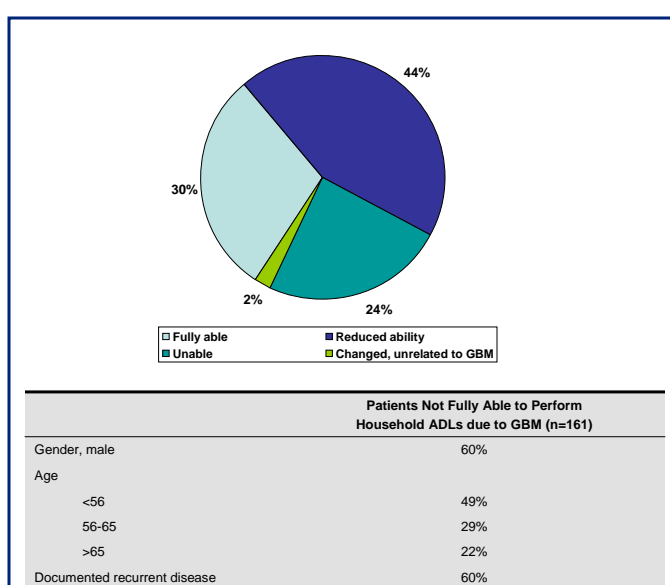
Sample Characteristics

	Overall (N=270)	Work Status information (n=207)	Household ADLs (n=236)	Self-care ADLs (n=238)
Gender, male	64%	65%	63%	64%
Age				
<56	50%	53%	51%	51%
56-65	29%	30%	29%	30%
>65	21%	17%	20%	19%
Documented disease recurrence	56%	57%	55%	56%

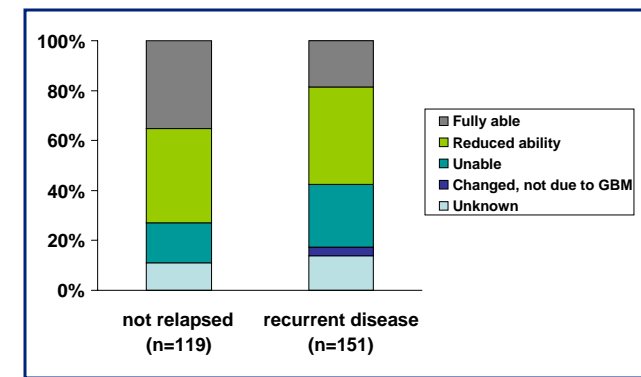
Patients with Known Work Status Prior to Diagnosis (n=207)



Patients with Known Household ADLs (n=236)

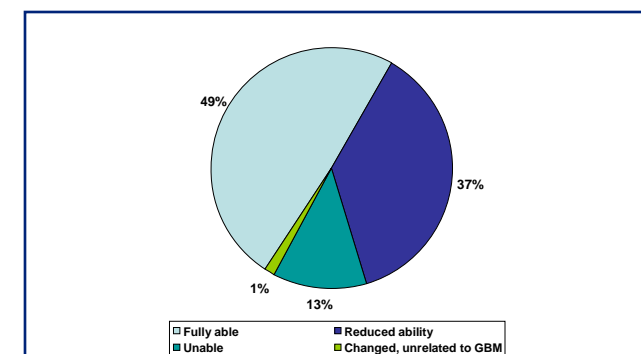


Household ADLs

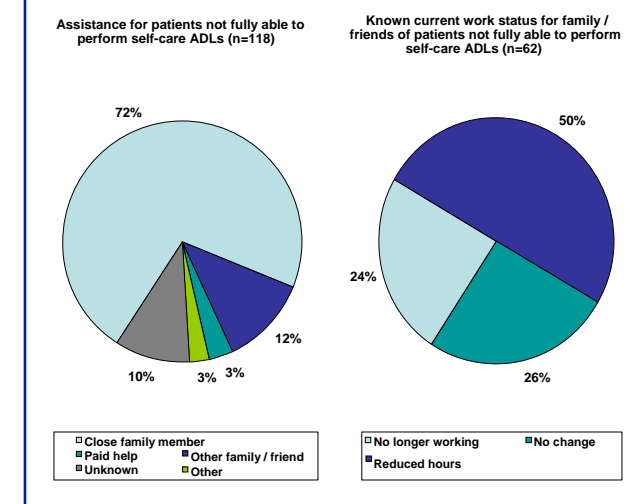


- Relative to patients without disease relapse, recurrence is associated with a greater proportion of patients with reduced ability to perform household ADLs. Accordingly, a larger proportion of family/friends reduce or cease working for pay to assist (58% vs 71%)

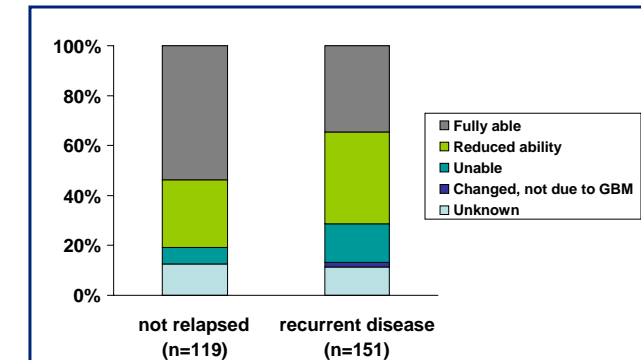
Patients with Known Self-care ADLs (n=238)



Patients Not Fully Able to Perform Self-care ADLs due to GBM (n=118)	
Gender, male	63%
Age	
<56	46%
56-65	31%
>65	23%
Documented recurrent disease	66%



Self-care ADLs



- Relative to patients without disease relapse, recurrence is associated with a greater proportion of patients with reduced ability to perform self-care ADLs. Accordingly, a larger proportion of family/friends reduce or cease working for pay to assist (71% vs 75%)

CONCLUSIONS

- GBM reduces productivity of patients in terms of work status
- GBM reduces patients' abilities to perform ADLs
 - To assist with ADLs, family members and friends reduce work status
- The negative impact of GBM increases with disease recurrence