WORK PRODUCTIVITY AND ACTIVITY IMPAIRMENT AMONG CHRONIC SPONTANEOUS/IDIOPATHIC URTICARIA PATIENTS: RESULTS FROM THE FIRST INTERNATIONAL BURDEN OF ILLNESS STUDY (ASSURE-CSU)

Balp MM1, Chambenoit O1, Chiva-Razavi S1, Lynde C1, Sussman G1, Chapman-Rothie N2, Weller K1, Maurer M1, Koenders J1, Knust AC1, Halliday A1, Alexopoulos ST1, Nakonechna A2, Grattan C1, Abuzakouk M1, Sweeney C1, Radder C1, Wolin D1, McBride D1, Hollis K3, Tian H4, Oude Elberink JG5

1Novartis Pharma AG, Basel, Switzerland | 2Novartis Pharmaceuticals Canada Inc., Dorval, QC, Canada | 3Lyondem Research Inc., Toronto, ON, Canada | 4Michael’s Hospital, University of Toronto, Toronto, ON, Canada | 5Novartis Pharma GmbH, Nuernberg, Germany | 6Charite - Universitätsmedizin Berlin, Berlin, Germany | 7Novartis Pharma B.V., Arnhem, Netherlands | 8University Medical Center Utrecht, Utrecht, Netherlands | 9Novartis Pharmaceuticals UK Limited, Surrey, United Kingdom | 10Royal Liverpool and Broadgreen University Hospitals NHS Trust, United Kingdom | 11Norfolk and Norwich University Hospital, Norwich, United Kingdom | 12Cleveland Clinic Abu Dhabi, Al Maryan Island, Abu Dhabi, UAE | 13RTI Health Solutions, Research Triangle Park, NC, USA | 14RTI Health Solutions, Ann Arbor, MI, USA | 15RTI Health Solutions, Manchester, United Kingdom | 16Novartis Pharmaceuticals Corporation, East Hanover, NJ, USA | 17University Medical Center Groningen, Groningen, Netherlands

BACKGROUND

- Chronic spontaneous (also known as idiopathic) urticaria (CU/CDU) is the occurrence of wheals (hives), angioedema or both for 6 weeks or longer due to known or unknown causes
- CU/CDU has an impact on healthcare payers and also on society in terms of indirect costs (i.e., productivity losses arising from reduced performance at work or absence from work)
- There is limited real world research quantifying the impact of CU/CDU on work and non-work activity in patients who are symptomatic despite treatment

OBJECTIVE

- The ASSURE-CSU study is an observational, non-interventional, multinational study conducted in Canada, France, Germany, Italy, Netherlands, UK, Spain and the Netherlands to identify, and quantify the humanistic, and economic burden of illness in inadequately controlled CU/CDU patients
- Here we summarise the work and activity impairment among patients enrolled in Canada, Germany, UK, and the Netherlands

METHODS

Study design
- This study included a 1-year retrospective medical record abstraction, a cross-sectional patient reported outcomes survey, and a 7-day prospective patient diary

Patient population
- Adult patients with a clinician-confirmed, guideline-defined diagnosis of CU/CDU
- Patients had received at least one treatment course with an H1-antihistamine
- Patients had been symptomatic for more than 12 months at least 3 days per week and were currently symptomatically despite treatment

Outcomes
- CU/CDU-related work days missed and productivity losses were measured using the Work Productivity and Activity Impairment - Specific Health Problem (WPAI-SHP)
- Patients completed a 7-day diary for itch severity and number of hives - Urticaria Activity Score over 7 days (UAS7) and in the 8th day reported to the WPAI-SHP (recall period – previous 7 days coinciding with the UAS assessment period)
- WPAI-SHP measures four metrics pertaining to:
  - Absenteeism (the percentage of work time missed because of one’s health problem in the past 7 days)
  - Presenteeism (the percentage of impairment experienced while at work in the past 7 days because of one’s health problem)
  - Overall work impairment (an overall impairment estimate calculated by an algorithm of absenteeism and presenteeism)
  - Activity impairment (the percentage of impairment in daily activities because of one’s health problem in the past 7 days)
- WPAI-SHP scores were multiplied by 100 to be expressed as percentages. Higher scores reflect greater impairment and reduced productivity
- UAS7 scores range from 0 to 42 with higher scores indicating severity of urticaria symptoms and signs
- UAS7 scores were used to define categorical disease states (Table 1)

Data analysis
- Data were described descriptively using mean values and standard deviations for continuous variables and counts and proportions for categorical variables
- All patients included for activity impairment analysis; only employed patients were included for absenteeism, presenteeism and work impairment analysis
- WPAI-SHP were reported descriptively by four disease severity levels based on UAS7 scores

RESULTS

- A total of 88, 74, 74 and 73 patients completed the patient diary in Canada, Germany, UK and the Netherlands, respectively. Of these, 54.7%, 72.3%, 51.4% and 52.7% patients were currently employed, respectively
- Canada
  - Mean (SD) time loss due to absenteeism and presenteeism were 6.0% (12.0%) and 29.8% (26.3%), respectively, with an overall work impairment of 35.8% (30.1%) and activity impairment of 38.5% (31.3%). The activity impairment was 39.5% (30.3%) (Figure 1)
  - Overall Work Impairment
  - Activity Impairment
- Germany
  - Mean (SD) time loss due to absenteeism was 7.4% (20.0%); presenteeism was 27.9% (25.7%), within an overall work impairment of 30.5% (26.8%). The activity impairment was 38.4% (28.5%) (Figure 2)
  - Overall Work Impairment
  - Activity Impairment
- The Netherlands
  - Mean (SD) time loss due to absenteeism and presenteeism were 2.3% (8.9%) and 19.9% (25.4%), respectively, with an overall work impairment of 20.7% (28.6%) and activity impairment of 31.0% (27.9%) (Figure 3)
- United Kingdom
  - Mean (SD) time loss due to absenteeism was 9.9% (23.2%); presenteeism was 33.1% (30.0%), with an overall work impairment of 35.3% (30.1%). The activity impairment was 39.5% (30.3%) (Figure 4)

Impact on work productivity with increased UAS7 severity
- Across the countries, the percentage of work time missed due to CU/CDU and the other parameters increased with the increase in UAS7 scores. The highest absence and impairment were observed in the UAS7 score 28-42 category (Figure 5)

CONCLUSION

- The results are consistent among the countries and demonstrate that symptomatic patients with CU/CDU experience a substantial impact on their daily activities. Many employed patients are affected at work by their disease through absenteeism or reduced productivity at work resulting in substantial economic impact for employers and society
- Across the countries, percentage of work time missed due to CU/CDU and overall work activity impairment increased with disease severity

REFERENCES


CONFLICT OF INTEREST

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