OF HEADACHE DISORDERS AND RESOURCES IN THE WORLD 2011

A collaborative project of World Health Organization and Lifting The Burden



WHO Library Cataloguing-in-Publication Data

Atlas of headache disorders and resources in the world 2011.

1. Headache disorders – epidemiology. 2. Headache disorders – prevention and control. 3. Headache – epidemiology. 4. Cost of illness. 5. Data collection. 6. Delivery of health care. I. World Health Organization.

ISBN 978 92 4 156421 2 (NLM classification: WL 342)

© World Health Organization 2011

All rights reserved. Publications of the World Health Organization are available on the WHO web site (www.who.int) or can be purchased from WHO Press, World Health Organization, 20 Avenue Appia, 1211 Geneva 27, Switzerland (tel.: +41 22 791 3264; fax: +41 22 791 4857; e-mail: bookorders@who.int).

Requests for permission to reproduce or translate WHO publications – whether for sale or for noncommercial distribution – should be addressed to WHO Press through the WHO web site (http://www.who.int/about/licensing/copyright_form/en/index.html).

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use.

Printed in Trento, Italy

FOREWORD

Headache disorders are among the most common disorders of the nervous system, causing substantial ill-health and disability in populations throughout the world. Despite this, they are underestimated in scope and scale, and there is little recognition of their public-health impact. It is not known how, or how effectively, health-care and other resources are utilized to mitigate their effects.

WHO has a number of important initiatives in the field of clinical neuroscience designed to promote international collaboration, enhance research capacity and, above all, develop programmes to benefit communities worldwide affected by neurological disorders. Among them is *Project Atlas*, a series of publications now including the *Atlas of Headache Disorders*, the result of a collaborative study by WHO and the nongovernmental organization, *Lifting The Burden*: the Global Campaign against Headache. The Global Campaign involves multiple nongovernmental organizations, academic institutions and individuals worldwide, with objectives not only of better professional, public and political awareness of the global burden of headache but also of solutions to it.

It might appear that production of an Atlas would be difficult in relation to headache disorders, but this publication, carefully and expertly designed and covering, as it does, very important causes of population ill-health and disability, is highly appropriate and timely. Its introduction provides a clear description of its purpose, definitions and descriptions of the principal headache disorders and an account of barriers to care that must be

overcome if these are to be managed effectively. The results, gathered from respondents from more than half the world's countries, are set out in themes: epidemiology, the impact of headache disorders on society, health-care utilization, diagnosis, assessment and treatment, professional training and the importance of national professional organizations are all given full consideration.

The key messages derived from this project can be expected to have major influence upon the recognition and management of headache disorders across the world. This publication is likely to be widely read; it is an important resource for doctors and others interested in headache disorders or concerned with their management, especially policy-makers.

Lord Walton of Detchant, Kt TD MA MD DSc FRCP FMedSci

Former President, World Federation of Neurology Crossbench Life Peer, UK House of Lords

FOREWORD

CONTENTS



8	PROJECT TEAM AND PARTNERS
9	PREFACE
10	EXECUTIVE SUMMARY
14	INTRODUCTION
15 17 17 17	HEADACHE DISORDERS EPIDEMIOLOGY AND BURDEN BARRIERS TO CARE PURPOSE OF THE ATLAS OF HEADACHE DISORDERS
18	METHODS
19 19 19	QUESTIONNAIRE DEVELOPMENT IDENTIFICATION OF RESPONDENTS DATA COLLECTION DATA MANAGEMENT AND ANALYSIS
20	RESULTS
20 21 23 23	DATA QUALITY REPRESENTATIVENESS LIMITATIONS DATA ORGANIZATION AND PRESENTATION
24 25 26 30 36 44 54 56	THEMES EPIDEMIOLOGY IMPACT ON SOCIETY, AND NATIONAL DATA HEALTH-CARE UTILIZATION DIAGNOSIS AND ASSESSMENT TREATMENT PROFESSIONAL TRAINING NATIONAL PROFESSIONAL ORGANIZATIONS ISSUES
62	THE WAY FORWARD
66	REFERENCES
68	LIST OF RESPONDENTS

CONTENTS 7

PROJECT TEAM AND PARTNERS

The Atlas of Headache Disorders is a project of WHO headquarters, Geneva, supervised and coordinated by Dr Shekhar Saxena and Dr Tarun Dua. Dr Benedetto Saraceno provided guidance and Dr Colin Mathers gave technical input.

The project was carried out in close collaboration with Lifting The Burden as a key component of the Global Campaign against Headache, directed by Professor Timothy Steiner. Professor Lars Jacob Stovner and Professor Steiner provided expert support, and they and Dr Dua designed the survey methods and questionnaire. Professor Steiner, assisted by Mrs Ulla Schultz, was responsible for project management on a practical level. Respondents were found with help from the International Headache Society, European Headache Federation, World Headache Alliance and World Federation of Neurology. Professor Stovner and Ms Gøril Gravdahl, supported by the Norwegian University of Science and Technology, undertook questionnaire distribution, query resolution and data collection and management. Dr Dua and Dr Nelly Huynh conducted the analyses. Professor Steiner, with assistance from Dr Huynh, took primary responsibility for writing this report.

The information from various countries, areas and territories was provided by neurologists, headache specialists, general practitioners and patients' representatives identified from multiple sources by Professor Steiner, Mrs Schultz and Ms Gravdahl. The list of the respondents is included at the end of the Atlas.

The contributions of each of the team members and partners, along with input from many other unnamed people, have been vital to the success of this project.

Ms Adeline Loo provided administrative support in the preparation and production of the document. Assistance in preparing the Atlas for publication was received from Ms Erica Lefstad and Mr Christian Bäuerle (graphic design) and from Mr Christophe Francois A Grangier (map design). Professor Paolo Martelletti supported production through Sapienza University of Rome and the Italian League of Headache Patients.

Dr Shekhar Saxena, Dr Tarun Dua, Dr Benedetto Saraceno and Dr Colin Mathers:

World Health Organization, Geneva, Switzerland

Professor Timothy Steiner and Professor Lars Jacob Stovner: Norwegian University of Science and Technology, Trondheim, Norway, and *Lifting The Burden*, London, United Kingdom

Ms Gøril Gravdahl:

Norwegian University of Science and Technology, Trondheim, Norway

Mrs Ulla Schultz:

Lifting The Burden, London, United Kingdom

Dr Nelly Huynh:

University of Montreal, Montreal, Canada

Ms Adeline Loo:

World Health Organization, Geneva, Switzerland

Ms Erica Lefstad and Mr Christian Bäuerle: Graphic Design, Munich, Germany

Mr Christophe Francois A Grangier: World Health Organization, Geneva, Switzerland

Professor Paolo Martelletti: Sapienza University, Rome, Italy

Italian League of Headache Patients (LIC – ONLUS), Rome, Italy

PREFACE

Headache is felt, at some time, by nearly everybody, and almost half the world's adults at any one time have recent personal experience of one or more headache disorders. In the Global Burden of Disease Study, updated in 2004, migraine on its own was found to account for 1.3% of all years of life lost to disability worldwide. Other headache disorders, collectively, may be responsible for a similar burden.

Yet, much is unknown about the public-health impact of these conditions. While our view of the global burden attributable to headache disorders is incomplete, and our knowledge of health-care resource allocation to headache is scant, there is good evidence that very large numbers of people disabled by headache do not receive effective health care. The barriers responsible for this vary throughout the world, but poor awareness in a context of limited resources generally – and in health care in particular – is undoubtedly high among them everywhere.

The World Health Organization (WHO) initiated *Project Atlas* with the objective of collecting, compiling and disseminating relevant information on health-care resources in countries. Within *Project Atlas*, information has been collected for various domains of mental and neurological services and conditions of public-health priority. The *Atlas of Headache Disorders* is an important addition to this series. The *Atlas of Headache Disorders* presents the results of the survey carried out by WHO in collaboration with the nongovernmental organization, *Lifting The Burden*, in order to collect and disseminate

information on the burden of headache disorders and the resources available to reduce them. The facts and figures presented within it illuminate the worldwide neglect of a major cause of public ill-health and reveal the inadequacies of responses to it in countries throughout the world.

The findings of the *Atlas of Headache Disorders* have specific implications for the work of public-health professionals, academicians, service user groups, health planners and other stakeholders. We are aware of severe limitations in the data presented in this Atlas and welcome suggestions to improve the quantity and quality of data, especially for countries where no information is available or it is scarce.

The eventual objective of the project is to use the information collected through the *Atlas of Headache Disorders* to enhance global and national awareness and improve care and services for people with headache disorders. We hope it will assist health planners and policy-makers as well as professionals at every level involved in caring for people with headache disorders, and that nongovernmental organizations, wherever they exist, will use the *Atlas of Headache Disorders* in their advocacy efforts for more and better headache care.

Dr Shekhar Saxena

Director, Department of Mental Health and Substance Abuse, World Health Organization, Geneva, Switzerland

Professor Timothy J Steiner

Global Campaign Director, *Lifting The Burden*, London, UK; Professor of Medicine (Headache and Global Public Health), Norwegian University of Science and Technology, Trondheim, Norway

EXECUTIVE SUMMARY



https://www.yunbaogao.cn/report/index/report?reportId=5_28873

