Introduction

• Patients with severe chronic hand eczema (sCHE) may not recognize the disease as such, but experience a range of symptoms to varying degrees over extended periods. 1
• sCHE symptoms are often not fully-controlled by topical steroids and can have considerable impact on quality of life. 2
• There is currently no universally accepted definition or classification for sCHE and the condition can be under-reported. 3
• Therefore, diagnosis remains problematic and resulting prevalence and burden data are limited. 4
• In order to overcome the lack of data, patients with sCHE were screened from adult consumer panels to examine the prevalence of sCHE, and to establish the ‘patient journey’ from initial consultation through to diagnosis and ongoing management.

Objectives

• The primary objective of this study was to rapidly generate global prevalence estimates for sCHE. 5
• Secondary objectives included examining treatment-seeking behavior patterns, establishing for how many patients the condition is not adequately managed with topical steroids, and assessing burden of disease.

Methods

• Nationally representative samples were recruited via consumer research panels in eight countries (US, UK, France, Germany, Japan, China, Brazil, and Chile) to complete an online screening survey in March 2014. 6
• Respondents answered a number of screening questions to determine whether they suffer from eczema on the hands. 7
• Respondents were classified as ‘sufferers’ if they had received a formal diagnosis of sCHE, but were also allowed to ‘self-report’ by selecting qualifying responses for length of time experiencing symptoms, frequency and duration of flares, affected hand surface area, and severity. 8
• Participants meeting the inclusion criteria were included in the full online survey conducted in April 2014 (except China: June 2014).

Results

Prevalence

• The screening survey was completed by 34,765 respondents across eight countries, of whom 147 had potential sCHE and completed the full survey: mean age was 43 years and mean duration of symptoms was 10.6 years (Table 1). 9
• The estimated prevalence of potential sCHE ranged from 0.13% to 0.8%, and globally was estimated to be 0.54% (excluding Brazil; Figure 1). 10

[Table 1. Respondents screened online]

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>2,500</td>
<td>320</td>
<td>210</td>
<td>140</td>
<td>90</td>
<td>70</td>
<td>50</td>
<td>40</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>UK</td>
<td>2,500</td>
<td>320</td>
<td>210</td>
<td>140</td>
<td>90</td>
<td>70</td>
<td>50</td>
<td>40</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>2,500</td>
<td>320</td>
<td>210</td>
<td>140</td>
<td>90</td>
<td>70</td>
<td>50</td>
<td>40</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>2,500</td>
<td>320</td>
<td>210</td>
<td>140</td>
<td>90</td>
<td>70</td>
<td>50</td>
<td>40</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>2,500</td>
<td>320</td>
<td>210</td>
<td>140</td>
<td>90</td>
<td>70</td>
<td>50</td>
<td>40</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>2,500</td>
<td>320</td>
<td>210</td>
<td>140</td>
<td>90</td>
<td>70</td>
<td>50</td>
<td>40</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Brazil</td>
<td>2,500</td>
<td>320</td>
<td>210</td>
<td>140</td>
<td>90</td>
<td>70</td>
<td>50</td>
<td>40</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Chile</td>
<td>2,500</td>
<td>320</td>
<td>210</td>
<td>140</td>
<td>90</td>
<td>70</td>
<td>50</td>
<td>40</td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

• Inclusion criteria for the full survey included being aged 18–75 years old, a history of eczema/extrinsic-atopic dermatitis on the hands, the condition causing 20% of the most affected hand, symptoms for 2 years, 2 days or less, and severity of flare/duration ≥1 month and a self-rating of severe, very severe or even worse based on validated 5-point photographic scale developed by Fishawack Ltd. 11

• Questions on treatment and burden of disease were then answered by respondents who met the qualifying criteria for sCHE. 12
• To determine national prevalence, proportions were adjusted in line with population data to be nationally representative for each country. 13

• In India, 10 states with Hindi and English as the predominant language were surveyed and projected to a geographically representative population for these regions only, the two upper age groups (>50 years of age) for India were pooled, due to an under-representation of this age group. 14

Conclusions

• The majority of patients (91%) had discussed their symptoms with a physician or other HCP (Figure 3). 15
• In the UK, 63% of patients had seen a GP, whereas in Germany, 51% of patients discussed their symptoms with a pharmacist. 16
• In India and China, all patients had spoken to a HCP, and in Japan nearly all first consultations were with a dermatologist. 17

• The prevalence estimates of patients with potential iCHE are consistent with those reported previously (0.5–0.7%), variations across countries may reflect differences in patient care and medical practices in the countries studied. 18
• Limitations of this study include:
  – The population was self-selecting, and therefore may include patients who are more likely to seek treatment.
  – For some endpoints the number of patients was low, as would be expected for a disease with low prevalence. Therefore, some differences may be directional only.
  – Online consumer panels tend to have lower representation of individuals with lower income and educational credentials (e.g., Brazil, in the case of this study). Supplementary pen and pencil surveys may be beneficial in increasing representation and increasing sample size, although these can be costly and time-consuming.
  – However, the results demonstrate that this methodology is useful and pragmatic for the study of diseases or conditions for which data are limited and could be utilized to study other rare, taboo, or underdiagnosed conditions.

References

6. Fishawack Ltd, Epsom, UK
7. Kantar Health, Epsom, UK
8. The study was conducted by Kantar Health and funded by Astellas (a pharmaceutical company). Phillip Mawer was an author of the paper and one of the employees who provided medical writing and editing was provided by Louise Pettifer, PhD, of Protagonist India Ltd., UK, and was funded by Astellas Pharma Global Development, Inc., a subsidiary of Astellas, Japan.
9. *China only
10. **China only
11. Fishawack Ltd
12. Fishawack Ltd
13. Fishawack Ltd
14. Fishawack Ltd
15. Fishawack Ltd
16. Fishawack Ltd
17. Fishawack Ltd
18. Fishawack Ltd

Acknowledgments

• The authors gratefully acknowledge the support of and thank the authors and co-authors who contributed to the study. The authors would also like to thank the following employees of Kantar Health who supported the project and provided medical writing and editing services: Louise Pettifer, PhD, of Protagonist India Ltd, UK, and was funded by Astellas Pharma Global Development, Inc., a subsidiary of Astellas, Japan.