Global survey study of awareness, care and treatment of adolescents living with obesity, their caregivers and healthcare professionals: ACTION Teens

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ACTION Teens is the largest study of adolescents living with obesity and is unique in surveying three groups of stakeholders

Background

• Obesity that is present in adolescence is likely to persist into adulthood, and has a more severe lifelong impact than adult-onset obesity.2,3

• Early intervention is indicated in children and adolescents living with obesity (ALwO), as it predicts better long-term reduction in body mass index (BMI).4

• Even modest BMI reductions are associated with improvement in cardiometabolic risk.5

• ACTION Teens aims to improve obesity management and treatment for ALwO by:
  - Generating evidence to drive awareness of the needs of ALwO and caregivers
  - Identifying areas of misalignment among ALwO, caregivers and healthcare providers (HCPs).

Methods

• ACTION Teens is a landmark cross-sectional, quantitative survey-based study.

• Primary outcome: describe awareness, perceptions and behaviours related to obesity and its management among ALwO, their caregivers and HCPs.

• Survey materials were designed under the guidance of an international steering committee (SC) consisting of HCPs and subject matter experts. Separate but overlapping surveys were developed for each sample group.

• Question domain descriptions are shown in Figure 1.

Figure 1: Survey domains

Overall health & wellbeing
Weight loss
Interactions with HCPs
Impact of obesity
Information sources
Attitudes about obesity & food
Sociodemographics

Participants

• In each participating country (Figure 2), ALwO caregivers were recruited from a general population sample stratified to match local demographic targets for adults; permission was sought for the relevant ALwO to be involved. HCPs were recruited from online physician panels. Key inclusion criteria are shown in Table 1.

Data collection

• Cross-sectional data were obtained from online surveys, although in-person administration was permitted in Saudi Arabia, Taiwan and Turkey.

Table 1: Key inclusion criteria

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<th>ALwO</th>
<th>Caregivers of ALwO</th>
<th>HCPs</th>
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| Age: n=12 to 18 years | Obesity according to BMI ≥25% percentile for age and sex, per locally appropriate definitions | Primary care physicians, paediatricians or specialists who see ≥10 ALwO in a typical month | Ability to speak English
| Parent or legal guardian of an ALwO who lives in the same household | ≥50% of the time | ≥50% of time in direct patient care |
| Involved in the ALwO’s healthcare decisions | ≥50% of the time | ≥50% of time in direct patient care |

Data analysis

• Sample sizes were selected to reflect local ALwO populations and to balance recruitment feasibility and statistical power, with the intention of performing local sub-analyses.

• All respondents who completed the survey will be included in the full analysis set.

• Statistical analyses will include:
  - Descriptive statistics for all outcome measures across the total population for each country and for data subsets (e.g. group age, sex and region)
  - Classical tests of hypotheses to identify differences in responses between data subsets
  - Linear regression and Pearson correlation coefficients to model relationships between outcomes of interest for key data subsets (e.g. ALwO age and sex).

• Caregivers of ALwO data will be weighted on key local demographic targets (based on government or peer-reviewed data) to reflect local adult populations.

• It would not have been possible to directly assess the impact of pubertal stage on outcomes without including potentially culturally inappropriate questions. Thus, a proxy of age subgroups was considered appropriate by the SC.

Strengths of study design

• Analysis of three key stakeholders – ALwO, their caregivers and HCPs – across 10 countries

• Use of locally appropriate age-specific definitions of obesity

• Stratified sampling and demographic weighting of ALwO caregivers to mitigate selection bias and for generalisability

• Matched pairs of ALwO and caregivers were maximised by seeking permission for the relevant ALwO to be involved

Data dissemination

• Results will be reported in 2022, with overall data published beforehand.

• If variables of interest are identified, additional sub-analyses may be considered (under SC’s guidance).

Conclusions

• ACTION Teens, a landmark study and the largest of its kind, will provide critical global insights to improve awareness of management, treatment and support for ALwO.

• Insights will be used to guide collaborative action to improve care, education and support for ALwO and their caregivers, and create a communication platform to help change how ALwO, caregivers and HCPs manage, treat and support obesity.

• Due to the cross-sectional design, it will not be possible to determine causal relationships, but data may help to generate hypotheses for future studies.

References:


Presented at: espe2021/Halford.html

https://sciencehub.novonordisk.com/