Aims

The media is a known driver of health-related stigma, but little is known about its impact on people with diabetes. We aimed to: 1) qualitatively explore the perceptions of the role of the media in stigmatising Type 2 diabetes from the perspective of those living with this condition; 2) to quantitatively assess the association between perceptions of Type 2 diabetes stigma in the media and diabetes distress amongst people with Type 2 diabetes.

Methods

This mixed-methods study constituted semi-structured interviews with adults with Type 2 diabetes (N=25, aged 22-79 years), and a national online survey (MILES-2 study) of adults with Type 2 diabetes (N=1,197, aged 22-75 years). In the survey, perceptions of Type 2 diabetes stigma in the media were assessed by four study-specific items; diabetes distress was measured using the Problem Areas In Diabetes scale.

Results

Interview participants perceived the media, particularly news media and health promotion campaigns, to contribute to Type 2 diabetes stigma. Examples included negative stereotyping, blame-based and negatively-framed messages about diabetes. Participants described negative emotional impacts of perceived stigma. Hierarchical regression analyses of the survey data confirmed the latter finding: perceptions of Type 2 diabetes stigma in the media was significantly, positively correlated with diabetes distress, after controlling for confounders (β=.27, p<0.01).

Conclusion

Adults with Type 2 diabetes perceive the media to be a key driver of diabetes stigma, and perceiving this stigma is associated with poorer diabetes-specific emotional well-being. Consideration must be given to unintended consequences of media messages about Type 2 diabetes.

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Background
The media is a known driver of health-related stigma.1,2 However, research into the role of the media in generating or perpetuating diabetes stigma is lacking. Further, it is not known how people with diabetes perceive media representations of the condition, and what impact these representations have on their emotional well-being.

Aims
To explore qualitatively the perceptions of the role of the media in stigmatising Type 2 diabetes (T2D) from the perspective of those living with the condition;
To assess quantitatively the association between perceptions of diabetes stigma in the media and diabetes distress.

Methods
Study A: Qualitative interviews
- Semi-structured interviews with 25 Australian adults with T2D:
  - 12 (48%) women
  - Median age: 61 years (range: 22-79)
  - Median diabetes duration: 5 years (range: 0-29).
- The study was advertised in diabetes-related media as being about ‘the social experience’ of living with diabetes, to minimise self-selection bias.
- The full interview schedule included open-ended questions focused on perceived and experienced stigma across a range of settings.
- Interviews were audio-recorded, transcribed, and transcripts were imported into NVivo V.10.
- Data about role of the media in stigmatisation of T2D were extracted and subject to collaborative inductive thematic analysis by two authors (JLB and JT).

Study B: Quantitative online survey
- Data were drawn from the second Diabetes MILES – Australia (MILES-2) study; a national online survey about the psychosocial aspects of living with diabetes.
- Participants were primarily recruited through a random sample of 12,000 adults aged 18-75 with T2D from the National Diabetes Services Scheme registrant database.
- A total of 1,179 eligible respondents completed the relevant sections of the survey:
  - 510 (43%) women
  - Mean age: 61 years (range: 22-75)
  - Mean diabetes duration: 11 years (range: 0-44).
- For this analysis, the following data were extracted:
  - Demographic and clinical data
  - Perceptions of diabetes stigma and somewhat antagonistic attitudes towards T2D: 4-item scale informed by our prior research1 (Table 1). The mean of individual item scores formed a composite score (range 1-5).
  - Diabetes-specific distress: Problem Areas in Diabetes (PAID) scale. Higher scores (range 0-100) indicate greater distress.
  - The association between perceived media stigmatisation and diabetes-specific distress was explored using hierarchical regression analysis (Table 2).
- Control variables were selected on the basis of significant univariate tests (data not shown).

Results
Study A: Qualitative interviews
- Participants described diabetes media coverage in the following forms:
  - News media, e.g. newspaper articles or television news reports; n = 13
  - Health promotion campaign advertisement, e.g. T2D prevention campaigns; n = 10
  - Entertainment media, e.g. television comedy or drama series, movies, novels; n = 4.
- Participants described perceiving negative stereotyping, victim-blaming, and negatively-framed messages about T2D in the media (Figure 1).
- Negative emotional responses were common; most examples of this were diabetes-specific.

Figure 1. Themes and illustrative quotes from qualitative interviews

Evidence of stigmatisation in the media
- Negative stereotyping
- Victim-blaming
- Negatively-framed messages

Conclusion
This mixed-methods study is the first to explore the perceptions of media messages and representations about T2D from the perspective of people living with the condition.
- The qualitative data corroborated the themes that emerged from the quantitative data.
- Specifically, stigmatising media messages and representations of T2D were both noticeable and concerning for people with diabetes.
- The apparent relationship between perceived stigmatisation and diabetes-specific distress provides an imperative for changing the way T2D is discussed and represented in the media, including diabetes prevention campaigns.

References
2. Stuart H. Media portrayal of mental illness and its treatments. CNS Drugs, 2006;20;99-106.

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Table 1. Survey items about media representation and stigmatisation of Type 2 diabetes
<table>
<thead>
<tr>
<th>Media Representation</th>
<th>Positive (scores 1-1.99)</th>
<th>Neutral (scores 2.5-3.49)</th>
<th>Moderate-to-strong (scores 3.5-5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional impact</td>
<td>510 (43%)</td>
<td>23% (n=271)</td>
<td>44% (n=519)</td>
</tr>
<tr>
<td>Hurt &amp; offence</td>
<td>-5.4 [-6.6, -4.2]</td>
<td>-2.4 [-3.6, -1.2]</td>
<td>-1.1 [-2.3, -0.0]</td>
</tr>
<tr>
<td>Frustration</td>
<td>4.17 [3.3, 5.0]</td>
<td>4.64 [3.8, 5.5]</td>
<td>5.17 [4.3, 6.0]</td>
</tr>
</tbody>
</table>

Table 2. Final regression model for diabetes distress analysis
<table>
<thead>
<tr>
<th>Variable</th>
<th>B 95% CI for B</th>
<th>β</th>
<th>F</th>
<th>R²</th>
</tr>
</thead>
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<tr>
<td>Age</td>
<td>-.54 [-.66, -.42]</td>
<td>-.26**</td>
<td>4.53**</td>
<td>.23</td>
</tr>
<tr>
<td>Gender</td>
<td>-.29 [-.51, -.07]</td>
<td>-.08*</td>
<td>4.17</td>
<td>.11**</td>
</tr>
<tr>
<td>Insulin treatment</td>
<td>4.17 [3.9, 4.4]</td>
<td>.22**</td>
<td>4.64</td>
<td>.27**</td>
</tr>
</tbody>
</table>

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