

The role of the media in stigmatisation of Type 2 diabetes and association with diabetes distress: A mixed methods study

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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 ($\beta=.27$, $p<0.01$).

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 1,197 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 media stigmatisation of T2D: 4-item scale informed by our prior research³ (Table 1). The mean of individual item scores formed a composite score (range 1-5).
- Diabetes-specific distress: Problem Areas in Diabetes (PAID) scale⁴. 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



Study B: Quantitative online survey

- Perceptions of media stigmatisation of T2D were:
 - Moderate-to-strong (scores 3.5-5) for 44% (n=519)
 - Neutral (scores 2.5-3.49) for 23% (n=271)
 - Minimal (scores 1-2.49) for 33% (n=388)
- Perceptions of media stigmatisation of T2D were significantly and independently associated with diabetes-specific distress, after controlling for known confounders (Table 2).

Table 1. Survey items about media representation and stigmatisation of Type 2 diabetes

The media messages about diabetes make me feel like I am being judged
The media imply that I am to blame for my diabetes
The media messages about preventing type 2 diabetes make me feel blamed for having the condition
The media portrays people with diabetes in a negative way
Items scored on a 5-point Likert scale (1=strongly disagree, 5=strongly agree). Cronbach's $\alpha=0.93$

Table 2. Final regression model for diabetes distress analysis

	B	95% CI for B	β	F	R ²
Model fit statistics				4.53**	.23
Age	-.54	[-.66, -.42]	-.26**		
Gender	-2.94	[-5.16, -.73]	-.08*		
Insulin treatment	4.17	[1.97, 6.37]	.11**		
Number of complications	3.26	[2.40, 4.12]	.22**		
Perceived media stigmatisation	4.64	[3.69, 5.60]	.27**		

* p<.05, **p<.01

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 quantitative data corroborated the themes that emerged from the qualitative 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.

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