

Donation and transplantation coverage in the Canadian media: a content analysis of story focus over 2 decades

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SUMMARY

Media coverage affects policy and debates around organ donation and transplantation. We performed a content analysis of stories in the Canadian popular press with a focus on organ donation and transplantation. We built a data set of articles published between Jan. 1, 2000, and May 7, 2019, that included 2082 articles, and we assessed their headlines and lead paragraphs to determine the stories' focus and tone. The most common topics were recipients and donors (46.4%), policy (31.6%) and raising awareness/funds (26.6%). The tone of the articles was positive in 39.1%, neutral in 34.4%, and negative in 26.5%. The strong focus on patients in the reporting may be clouding critical policy discussions. Health communicators and policy-makers should continually assess how to create engaging messaging that remains accurate.

Important changes are taking place in the Canadian organ donation and transplantation landscape (e.g., presumed consent legislation in Nova Scotia, advancements in precision allocation, medical assistance in dying [MAiD]) that require policy-makers to consider issues of equity, trust and, as a result, public support. Media coverage affects policy and debates,¹⁻³ influencing the Canadian public's perception of organ donation and transplantation.³ We sought to analyze how donation and transplantation has been portrayed in the Canadian popular press over the past 2 decades, specifically with regards to which donation and transplantation stories receive the most focus.

DATA COLLECTION AND ANALYSIS

We built a collection of 2082 Canadian news articles covering relevant stories using the Dow Jones Factiva database. We searched for and downloaded English-language articles published between Jan. 1, 2000, and May 7, 2019, in Canada's most popular print media sources with "organ" and various forms of "donate" or "transplant" appearing in the headline or lead paragraph. See Appendix 1 (available at www.canjsurg.ca/lookup/doi/10.1503/cjs.012721/tab-related-content) for further details on our data collection choices and procedures.

We designed a content analysis approach to determine the focus of newspaper stories by applying and adapting the methods and findings from a similar study conducted in the US.¹ Our final story categorization list included 13 main focus categories, specific corresponding subcategories, and a secondary focus category to provide greater detail.

The content analysis coding process involved determining story type by analyzing the headline and lead paragraph, which was done as a means of replicating the general public's reading trends. We coded for tone (positive, negative, neutral) on the basis that increased and more effective donation and transplantation was positive. Reliability testing of the coding demonstrated adequate agreement (81.4%). See Appendix 1 for details on data analysis procedures, including coding frame.

Table 1. Total number of articles published by media source and by year

Media source	No. (%) of articles
<i>The Toronto Star</i>	279 (13.4)
<i>Ottawa Citizen</i>	240 (11.5)
<i>The Globe and Mail</i>	207 (9.9)
<i>National Post</i>	159 (7.6)
<i>The Hamilton Spectator</i>	148 (7.1)
<i>Edmonton Journal</i>	136 (6.5)
<i>Calgary Herald</i>	130 (6.2)
<i>Vancouver Sun</i>	130 (6.2)
<i>Montreal Gazette</i>	109 (5.2)
<i>Kitchener Waterloo Record</i>	103 (4.9)
<i>Windsor Star</i>	81 (3.9)
<i>Waterloo Region Record</i>	65 (3.1)
<i>Winnipeg Free Press</i>	62 (3.0)
<i>The London Free Press</i>	39 (1.9)
<i>Saskatoon Star Phoenix</i>	36 (1.7)
<i>The Ottawa Sun</i>	30 (1.4)
<i>The Toronto Sun</i>	29 (1.4)
<i>Vancouver Province</i>	26 (1.2)
<i>Regina Leader Post</i>	24 (1.2)
<i>The Calgary Sun</i>	17 (0.8)
<i>The Edmonton Sun</i>	17 (0.8)
<i>The Winnipeg Sun</i>	15 (0.7)
Year of publication	No. of articles
2019 (January–May)	39
2018	63
2017	73
2016	86
2015	97
2014	94
2013	118
2012	192
2011	88
2010	103
2009	99
2008	118
2007	150
2006	163
2005	88
2004	138
2003	78
2002	113
2001	64
2000	118
Average no. articles per year	107*

*Excludes the 39 articles published from January to May 2019.

ARTICLE CONTENT AND TONE

The 2082 news articles in our analysis were published in 22 Canadian newspapers (average 107 per newspaper) (Table 1). Policy-related topics received considerable focus (492 [23.6%]) — only slightly less than patient-focused narratives (combining recipients and donors, 506 [24.3%]). Combining the main and secondary focus, articles focused

Table 2. Main focus of all articles (n = 2082) and tone for each main focus topic

Main focus topic	No. (%) of articles	Tone, no. (%)		
		Positive	Negative	Neutral
Policy	492 (23.6)	106 (21.5)	163 (33.1)	223 (45.3)
Organ recipient	324 (15.6)	194 (59.9)	60 (18.5)	70 (21.6)
Raising awareness/funds	318 (15.3)	125 (39.3)	16 (5.0)	177 (55.7)
Donation rates	200 (9.6)	50 (25.0)	99 (49.5)	51 (25.5)
Organ donor	182 (8.7)	127 (69.8)	11 (6.0)	44 (24.2)
Procedure (medical)	139 (6.7)	84 (60.4)	42 (30.2)	13 (9.4)
Research	121 (5.8)	64 (52.9)	19 (15.7)	38 (31.4)
Organ harvesting, trafficking, transplant tourism	119 (5.7)	3 (2.5)	95 (79.8)	21 (17.6)
Ethics	73 (3.5)	20 (27.4)	24 (32.9)	29 (39.7)
Education	59 (2.8)	17 (28.8)	7 (11.9)	35 (59.3)
Other	24 (1.2)	6 (25.0)	11 (45.8)	7 (29.2)
Key figures	19 (0.9)	17 (89.5)	0 (0)	2 (10.5)
Business	12 (0.6)	1 (8.3)	4 (33.3)	7 (58.3)
Total	2082	814 (39.1)	551 (26.5)	717 (34.4)

Table 3. Secondary focus in all articles (n = 2082)

Secondary focus topic	No. (%) of articles	No. (%) of articles including main and secondary focus
Organ recipient	324 (15.6)	648 (31.2)
Organ donor	203 (9.8)	385 (18.5)
With at least 1 recipient or donor	460 (22.1)	966 (46.4)
Raising awareness/funds	236 (11.3)	554 (26.6)
Famous people	215 (10.3)	—
Hélène Campbell	76 (3.7)	—
Humboldt Broncos	21 (1.0)	—
Eugene Melynk	20 (1.0)	—
Wagner Twins	4 (0.2)	—
Policy	165 (7.9)	657 (31.6)
Legal proceedings	78 (3.9)	—
Social media	47 (2.3)	—
Ethnicity	44 (2.1)	—
Crowdfunding/public solicitation	37 (1.8)	—
Predictions	8 (0.4)	—
Other countries	297 (14.3)	—
USA	113 (5.4)	—
China	54 (2.6)	—
India	18 (0.9)	—
Australia	10 (0.5)	—
Philippines	9 (0.4)	—
UK	9 (0.4)	—
Spain	8 (0.4)	—

on patients in a total of 966 (46.4%) articles, on policy in 657 (31.6%), and on raising awareness/funds in 554 (26.6%). The topic of donation rates received considerably less attention (200 [9.6%]), as did stories focused on medical procedures (139 [6.7%]) and research (121 [5.8%]). Only a very small number of articles focused on specific

ances/ethnicities or particular cultural/ethnic groups (2.1%), crowdfunding/public solicitation (1.8%), or social media (2.3%) (Table 2 and Table 3).

The 492 stories with a main focus on policy were primarily focused on the topics of presumed consent for donation (108 [22.0%]), system management (104 [21.1%]), and obtaining organs (e.g., determining death) (88 [17.9%]) (Table 4).

The 324 stories focused on recipients were more often positive stories about individuals recovering from and living with an organ transplant (208 [64.2%]) than negative stories of individuals waiting for an organ (80 [24.7%]) or of individuals who passed away while waiting (8 [2.5%]) (Table 4). Donor stories (182 [8.7%]) typically focused on deceased donors (101 [55.5%]) rather than live donors (59 [32.4%]). Considerable attention was given to the stories of H el ene Campbell and Logan Boulet (Table 3 and Table 4).

The 318 stories with a main focus on raising awareness/funds typically covered high-profile galas (e.g., David Foster Foundation) and smaller community events. Most stories on donation rates reported rates being “too low” (149 [74.5%]), with only some of those “too low” stories including specific policy initiatives to increase donation rates (54 [27.0%]). Some donation stories reported how donation rates were improving (37 [18.5%]) (Table 4).

The overall tone of the articles had only a slight positive trend (39.1% positive) (Table 2). Stories focused on donors were typically positive (60.4% positive v. 6.0% negative), as were stories focused on recipients (59.9% positive v. 18.5% negative). Stories about raising awareness/funds were typically neutral or positive (55.7% neutral v. 39.3% positive), whereas policy-focused stories leaned toward negative (45.3% neutral v. 33.1% negative v. 21.5% positive). Half of all stories about donation rates were negative (49.5%) (Table 2).

DISCUSSION

The portrayal of organ donation and transplantation in the Canadian popular press from 2000 to 2019 typically had a slight positive-leaning tone (Table 2) and included a strong narrative focus on organ donors and recipients (46%). This raises questions about

Table 4. Main category focus including subcategory on all articles (n = 2082)

Main focus category	No. (%) of articles
Policy (n = 492)	
Opt in v. opt out, presumed consent	108 (22.0)
System management (e.g., database management)	104 (21.1)
Obtaining organs (organ trade, determining death)	88 (17.9)
Rules/laws around donation and transplantation (including family veto)	55 (11.2)
Other	53 (10.8)
Incentivizing donation (calls for, reflections from politicians)	42 (8.5)
Allocation (including denying donation)	36 (7.3)
Legal proceedings	6 (1.2)
Organ recipient (n = 324)	
Received organ (recovering, living)	208 (64.2)
Waiting	80 (24.7)
Received organ (died)	18 (5.6)
Died while waiting	8 (2.5)
Other	10 (3.1)
Organ donor (n = 182)	
Deceased	101 (55.5)
Live	59 (32.4)
Other	22 (12.1)
Raising awareness/funds (n = 318)	
Galas, promotional events	147 (46.2)
Calls to donate from public	114 (35.8)
Calls to donate from politicians or institutions	29 (9.1)
Other	28 (8.8)
Donation rates (n = 200)	
Too low	89 (44.5)
Too low (and specific policy or initiative to increase)	54 (27.0)
Too low (and reason/argument given why)	6 (3.0)
Total too low	149 (74.5)
Rising (improving)	37 (18.5)
Other	14 (7.0)
Procedure (n = 139)	
Controversies, complications (e.g., malpractice, drug shortages)	38 (27.3)
High number of successful procedures	28 (20.1)
Novel transplantation (e.g., penis)	27 (19.4)
New methods of storing, transplanting	25 (18.0)
Other	20 (14.4)
Stem cells	1 (0.7)
Research (n = 121)	
Other	67 (55.4)
Involving animals (i.e., pig cloning, etc.)	29 (24.0)
Involving stem cells	16 (13.2)
Pharmaceutical development	9 (7.4)
Ethics (n = 73)	
Religions or religious figures	31 (42.5)
Crowdfunding, public solicitation	20 (27.4)
Social role of donation (being a donor)	16 (21.9)
Other	6 (8.2)
Educational (n = 59)	
Focus solely on donation (e.g., how to be a donor)	29 (49.2)
Focus solely on transplantation (e.g., success rates)	9 (15.3)
Other (both donation and transplantation + specific media)	21 (35.6)
Key figures (n = 19)	
Medical professionals	12 (63.2)
Nonmedical	7 (36.8)

how these narrative elements might be influencing the understanding and evaluation of policies (e.g., changing to a presumed consent donation policy). Research shows, for example, that a patient/narrative focus, especially in the case of testimonials, can overemphasize anecdotes at the expense of facts, therefore potentially distorting systemic, population-based realities.²⁻⁵

The detailing of individual cases can help generate awareness of a positive donor response, but the question of which individuals' stories receive attention deserves consideration. Indeed, our content analysis noted a focus on specific ethnic/cultural groups in only 2% of articles. Further, there is a trend of focusing on the positive stories of donors and recipients rather than on, for example, recipients-in-waiting, which might have negative consequences on communicating Canada's organ donor shortages in an effective manner. Although low donation rates received some focus, they received less focus than fundraising and awareness-raising efforts and considerably less focus than patients.

While the high concentration of coverage on individuals might cloud critical policy discussions, news coverage focused strictly on policy or procedures without any narrative qualities might fail to capture readers' attention or generate emotional responses. Policy-makers must continually consider this communication tension, balancing the need for scientific and statistical accuracy against the use of engaging and relatable personal narratives.⁵ Communicators should also consider how issues of utility and equality are presented. Maintaining trust and a perception of fairness in our health care system remains essential. This will require the careful monitoring of Canadian media and clear, accurate, and creative communication approaches. In this regard, future media research could focus on a range of donation and transplantation topics, including discourse on specific organs, specific contexts, (e.g., transplantation for patients with HIV) in French-language articles, or on popular social media platforms.

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Data sharing: The data from this analysis can be made available upon reasonable request.

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