

Financial Incentives Associated with Hepatitis B Misinformation on Instagram

Online health misinformation poses a direct threat to patients and has broader reach and engagement than accurate information.

Table 1: Patterns of claims and associations with posts containing misinformation

Claims	Posts with claims N=103		Contains Misinformation				p-value
	N	%	Yes n=24		No n=79		
Activism	50	48.5	11	22.0	39	78.0	0.76
Prevention	27	26.2	2	7.4	25	92.6	0.02
Treatment	18	17.5	10	55.6	8	44.4	<0.01
Cure	12	11.7	3	25.0	9	75.0	<0.01
Natural	13	12.6	12	92.3	1	7.7	<0.01
Symptoms	15	14.6	9	60.0	6	40.0	<0.01
Censorship	9	8.7	6	66.7	3	33.3	<0.01
Other	33	32.0	13	39.4	20	60.6	<0.01

Table 2: Engagement with posts on Instagram that contain misinformation.

	Misinformation		No Misinformation		p-value
	Mean	95% CI	Mean	95% CI	
Likes	1,459	1,458-1,459	941-942	941-942	<0.01
Followers	24,075	24,075-24,076	68,192	68,192-68,192	<0.01
Following	1,322	1,322-13,232	910	910-910	<0.01

CONCLUSIONS

- Online information about Hepatitis B is unregulated and often contains misinformation.
- The intention of misinformation is often obscured and is commonly for-profit.
- Documenting the prevalence and reach of online misinformation about Hepatitis B lays the groundwork for public health interventions.
- Methodological approaches to describing online hepatitis B misinformation can extend to other gastrointestinal pathologies in the future research.

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BACKGROUND

- Online health information is unregulated and often contains misinformation.
- Misinformation poses a threat to patients and is often shared for a profit.
- We describe associations of hepatitis B misinformation with profitability on Instagram, which has over one billion users worldwide.

METHODS

- In December 2021, we collected the top (N=103) public Instagram posts that appeared using the terms "Hepatitis B" and "Hep B".
- Each post was coded for 72 variables including engagement (# of likes and comments), profitability (yes/no), and claims with misinformation (yes/no).

RESULTS

- 23% of posts contained misinformation about Hepatitis B and/or treatment.
- Claims about treatment, natural remedies, symptoms, and censorship had a higher proportion of posts with misinformation than accurate claims (Table 1).
- Post with misinformation had more engagement (1,599 likes vs. 970 likes), followed more accounts (1,127 vs. 899), and had fewer followers (22,920 vs. 70,442) on average than posts without misinformation (Table 2).
- Nearly one third were for-profit (29%), selling a product/service (34%), or had a conspiracy theory (30%, Figure 1).
- More misinformation posts were for-profit (43% vs. 13%, p<0.01) than accurate posts (Figure 1).

