

Supplementary Table

Supplementary Table 1: Sensitivity Analysis using Negative Binomial Regression with Account Clustered Robust Standard Errors

Variable	Likes, adjusted IRR (95% CI)	p value	Comments, adjusted IRR (95% CI)	p value
Current follower count, per doubling	1.46 (1.38 to 1.54)	<0.001	1.45 (1.32 to 1.59)	<0.001
Post age in days, per doubling	1.43 (1.27 to 1.61)	<0.001	1.34 (1.11 to 1.62)	0.002
Account type				
Healthcare professional	Reference		Reference	
Health organization	0.17 (0.08 to 0.37)	<0.001	0.24 (0.07 to 0.77)	0.017
Commercial	0.88 (0.45 to 1.73)	0.717	2.33 (0.41 to 13.13)	0.337
Influencer or advocacy	0.53 (0.19 to 1.44)	0.214	0.50 (0.13 to 1.93)	0.312
Individual	0.74 (0.41 to 1.34)	0.325	0.48 (0.21 to 1.13)	0.095
Caption language				
English	Reference		Reference	
Spanish or Portuguese	0.94 (0.64 to 1.38)	0.761	0.62 (0.29 to 1.32)	0.219
Turkish	0.56 (0.24 to 1.31)	0.179	0.42 (0.04 to 4.85)	0.488
Other or uncertain	0.78 (0.48 to 1.29)	0.338	1.25 (0.51 to 3.10)	0.624

IRR, incidence rate ratio; CI, confidence interval. Separate negative binomial regression models were constructed for like and comment counts using account clustered robust standard errors. The models were adjusted for current follower count, post age, account type, and caption language. Current follower count was transformed as $\log_2(\text{follower count} + 1)$, and post age was transformed using $\log_2$. Healthcare professional accounts and English language posts were used as the reference categories. The direction and statistical significance of the principal findings were consistent with the primary generalized estimating equation analyses.