#EC: Implications for public health practice and research from a content analysis of tweets about emergency contraception

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Learning objectives
1. Define characteristics of social media, including Twitter
2. Identify at least two ways which Twitter can be used by public health professionals focused on reproductive health issues
3. Describe the methodology applied in a content analysis of English-language tweets related to emergency contraception (EC)
4. Explain statistically significant differences found in tweet content and the related implications for public health practice and research

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Social media

- Used by individuals as well as groups to share information on a variety of topics
Tweet = information shared in < 140 characters
284 million monthly active users
500 million Tweets sent/day
77% of accounts outside US
Over 35 languages

Available at: https://about.twitter.com/company

Study purpose
Explore differences regarding how emergency contraception is discussed through Twitter
1. males versus females
2. holidays
3. weekends
4. shared

Methods
• Sample
  – English-language Tweets posted March 2011
    • “emergency contraception”
    • “morning after pill”
    • “day after pill”
• Coding
• Reliability analysis
Content categories

- Sender characteristics
- EC
- Twitter-specific tools (ie RT, #)
- Specific words of interest (ie abortion)
- Focus of tweet

Content categories

- Focus of tweet
  - News
  - Access
  - Humorous
  - Effectiveness
  - Personal/vicarious experience
  - Seeking advice
  - EC responsibility
  - Mechanism of action
  - Drug safety

Africa = 9
Asia = 14
Europe = 13
Oceania = 2
North America = 2
Latin America & Caribbean = 10

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**Males versus females**

Females were more likely than males to discuss the following:

- Birth control (7.12% vs. 4.2%; \( p = 0.002 \))
- Side effects (2.0% vs. 0.87%; \( p = 0.024 \))
- Responsibility (1.56% vs. 0.35%; \( p = 0.003 \))
Shared tweets

Content most often shared: (p < 0.001)
- humorous tone (31.0%)
- personal/vicarious experience (28.5%)

Higher Odds
- promiscuity (1.54; p = 0.03)
- birth control (1.39; p = 0.04)
- personal/vicarious experience (1.26; p = 0.01)

Lower Odds
- side effects = 5.62 (p < 0.001)
- drug safety = 4.15 (p < 0.001)
- news = 2.24 (p < 0.001)
Limitations

1. Snapshot of how EC is framed in Twitter
2. Language of tweets limited to English
3. Challenge of gathering user characteristics
4. Possibility of different interpretation due to short length of Tweets
5. Valence not possible to assess

Implications for research

1. Analyze valence of content
2. Repeat analysis to explore changes over time
3. Explore differences in discussion about EC on other holidays
4. Explore differences in other languages

Implications for practice

1. Leverage public in spreading messages about EC
2. Question the need to tailor messages by gender
3. Reconsider messaging about EC news
4. Consider ways to incorporate humor and personal/vicarious experiences into EC messages