Effects of Social Media on Patient Perceptions and Compliance
Annmarie Butare, OMS-II, Adarsh Gupta, DO, M.S., FACOFP
Department of Family Medicine, Rowan University School of Osteopathic Medicine (RowanSOM)
42 East Laurel Road, UDP-2100 • Stratford, NJ 08084

BACKGROUND
- Nearly all Americans use the internet or social media daily.
- Over 2/3 of Americans use the internet and social media to search for health information.
- 86% believe that the information they find on the internet and social media is reliable.
- 64% report that the information found on social media influenced their decisions regarding their healthcare.
- In reality, the quality of information online and on social media platforms is only correct 13% of the time AND more than ½ of all patients do not discuss their findings or concerns with their physicians.
- The noncompliance rate in America is approaching 50-70% and patients report less effective communication with their physicians.

GOAL
Use information gathered to guide effective communication and patient education to improve patient compliance and outcomes

METHOD
270 survey questionnaires collected from patients seeing their primary care physician at Rowan SOM Family Practice locations in New Jersey.
RESEARCH QUESTIONS

• Are our patients using social media platforms to learn about their medical conditions?

• How much do our patients trust the information provided by social media?

• Does social media use cause worry about medical conditions or drugs?

• How polarizing is the internet and social media on making decisions regarding health care?

• Does social media use correlate with poor patient compliance?
Effects of Social Media on Patient Perceptions and Compliance
Annmarie Butare, OMS-II, Adarsh Gupta, DO, M.S., FACOFP

Department of Family Medicine, Rowan University School of Osteopathic Medicine (RowanSOM)
42 East Laurel Road, UDP-2100 • Stratford, NJ 08084

STUDY DESIGN

PART 1: Demographics
- Education level
- Current Medical Conditions
- Current Medication Use
- Family Hx Substance Use and Addiction

PART 2: Social Media Use
- Do you use social media?
- What platforms do you use?
- Purpose for using Social Media?
- Number of years using Social Media?
- Number of hours per day using Social Media?
- How accurate is Social Media?
- Does Social Media have positive or negative effect on my life?

PART 3: Connections
Rank on 5 Point Likert Scale from “Strongly Agree to Strongly Disagree”
- I am satisfied with my current healthcare
- My physician educates me on my conditions, my medications, and all treatment options
- My physician ensures my understanding of my conditions and medications
- I learn about my medical conditions on the internet or on social media
- I learn about other medical conditions or global/national medical issues on the internet or on social media
- I am worried about the current opioid epidemic in the United States
- News regarding the opioid epidemic has made me fearful of taking medications
- I will always follow my physician’s recommendations
- I will always follow my physician’s recommendations for taking pain medications
- I always follow my physician’s advice for taking all other medications
**Results**

**Social Media Sources**
- 75% use social media
- 52% to learn about national health issues
- 40% to learn about personal medical conditions

**Correlation with “Total Number of Social Media Sources Used”**

<table>
<thead>
<tr>
<th>Source Description</th>
<th>Pearson’s Coefficient</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>I learn about my medical conditions on the internet or on social media</td>
<td>0.162</td>
<td>.015</td>
</tr>
<tr>
<td>I learn about other medical conditions or global/national medical issues on the internet or on social media</td>
<td>0.287</td>
<td>.000</td>
</tr>
<tr>
<td>I am worried about the current opioid epidemic in the United States</td>
<td>0.145</td>
<td>.029</td>
</tr>
</tbody>
</table>

**Correlation with “News regarding the opioid epidemic has made me fearful of taking pain medications”**

<table>
<thead>
<tr>
<th>Source Description</th>
<th>Pearson’s Coefficient</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>I learn about my medical conditions on the internet or on social media</td>
<td>0.172</td>
<td>.010</td>
</tr>
<tr>
<td>I learn about other medical conditions or global/national medical issues on the internet or on social media</td>
<td>0.189</td>
<td>.004</td>
</tr>
<tr>
<td>I am worried about the current opioid epidemic in the United States</td>
<td>0.403</td>
<td>.000</td>
</tr>
<tr>
<td>I will always follow my physician’s recommendations</td>
<td>0.232</td>
<td>.000</td>
</tr>
<tr>
<td>I will always follow my physician’s advice for taking pain medications</td>
<td>0.142</td>
<td>.032</td>
</tr>
</tbody>
</table>

**Correlation with “My physician educates me on my conditions, my medications, and all treatment options”**

<table>
<thead>
<tr>
<th>Source Description</th>
<th>Pearson’s Coefficient</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am satisfied with my healthcare</td>
<td>0.344</td>
<td>.000</td>
</tr>
<tr>
<td>I will always follow my physician’s recommendations</td>
<td>0.253</td>
<td>.000</td>
</tr>
<tr>
<td>I will always follow my physician’s advice for taking pain medications</td>
<td>0.184</td>
<td>.006</td>
</tr>
<tr>
<td>I will always follow my physician’s advice for taking all other medications</td>
<td>0.263</td>
<td>.000</td>
</tr>
</tbody>
</table>

**Belief of Social Media Accuracy**
- Probably True: 15%
- Definitely True: 3%
- Definitely False: 21%
- Probably False: 17%
- Neither True nor False: 44%
CONCLUSIONS AND FUTURE RESEARCH

✓ Over 3/4 of this patient population uses social media regularly, for an average of 2.23 hours a day; however, only 2.6% believe that what they read on social media is accurate.

✓ Higher number of sources used correlates with:
  o Worry about the US Opioid Epidemic
  o Poor adherence with physician recommendations

✓ Adherence to physician recommendations is significantly correlated with “direct in-office patient education” and “physician ensures patient understanding of conditions and medications” regardless of social media use and attitudes regarding the opioid epidemic.

It is the physician’s responsibility to ensure that their patients are collecting credible and accurate information. Considering the significant proportion of patients using social media to assist with medical decision making, physicians should incorporate this into their patient education in order to ensure patient understanding of the information gathered both outside and inside the medical office, thereby improving compliance and outcomes.

Acknowledgements
Research funding provided by Rowan University School of Osteopathic Medicine, Department of Family Medicine. The authors wish to thank Rowan University for their dedication to research.