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IMPROVING HOME MEDICATION LITERACY AND COMMUNICATION

Jeremy Altman B.A.

Hinesburg, VT Oct-Nov 2022

Mentor: Dr. Michelle Cangiano M.D.

Problem Identification

- A common problem that patients face in medication literacy are managing the proper use of medications in the setting of polypharmacy, along with being susceptible to pharmaceutical advertising on various media/word of mouth.
- Research has shown that Direct to Consumer Advertising (DTC) about medications are insufficient for patients to make informed decisions. A recent study looking at DTC advertisements from 2015-2016 showed that **“few advertisements were fully compliant with FDA guidelines, promoting off-label use and providing low-quality information”**¹
- AHEC Focus Area: Medical Practice Transformation
 - *Intended as an after-visit education tool for patients to practice safe home medical research to decrease exposure to misinformation, managing expectations about drugs they think are for them, and preventing making home medication errors when updating a medical regimen.*
 - *Can be used as guidance for providers to discuss historically common questions about managing medications, learning about new drugs, and supporting positive shared decision-making.*

Considerations

- A study examined the content of advertisements in 9 popular US women's fashion magazines and found that in magazines targeted to non-Hispanic White people, >65% of ads were for OTC meds whereas in magazines targeted towards Black/Latinx magazines, 80% of ads were for prescription advertisements.²
 - *Emotional appeal was featured more often in prescription ads than OTC meds.*²
- In a study interviewing patients over 65 y.o. taking at least 5 drugs for multiple comorbidities, it was found that they were taking an average of 7.9 meds.³
- Study interviewing 382 patients showed that in the last year, 75% of patients had at least one home medication error, 4% reported 4 or more errors.
 - *Reasons attributed to these errors included **multiple comorbidities, greater number of medications, frequent changes in prescriptions ,and inconsistency of messages/communication.***⁴

Community Perspective

- Conversation with Dr. [redacted] M.D. (Family Medicine Physician at Hinesburg Family Health Center)
 - *“Commonly get questions about drugs that they hear about on TV or from friends that are not right for them.”*
 - *“I am frequently given articles that patients found about treating their condition that are unfortunately not applicable to them due to the population and severity of condition being studied.”*
- Perspective of Dr. [redacted], Pharm D (Pharmacist at CVS South Burlington, VT)
 - *“I think it’s important for physicians to confirm that the patients know why they are taking a new medication and for how long, along with knowing which drugs they are stopping/continuing.”*
 - *“I get a lot of questions from patients about how to take their medications that is clearly explained in the informational pamphlets that are attached to each prescription they pick up.”*

Intervention

- Creation of a Dot Phrase in Epic that can be quickly accessed by physicians to add onto an "After Visit Summary" that is printed and handed to patients when they check out after a visit.
- The Dot Phrase is formatted as a list of Frequently Asked Questions regarding researching information about medications (side effects, how to take, managing polypharmacy, the components of a medical research paper to pay attention to when learning about a drug they hear about from advertisements)
- This Dot Phrase is intended to be employed by physicians when they are establishing care with a new patient, are worried about polypharmacy in a patient, or if they are concerned about patients discussing advertised drugs that may not be right for them.

Results

- Unfortunately, there was inadequate time between the creation of this Dot Phrase and the end of my time working at the Hinesburg Family Health Center to see physician response and implementation of the Dot Phrase.
- Follow-up with physicians at Hinesburg Family Health will proceed after the end of the rotation to receive qualitative feedback on how confident they felt that patients were learning about their medication regimen/advertised medications more effectively than without this literature.
- If follow-up were to continue, an anonymous survey would be curated and given to patients alongside the "After Visit Summary" to assess the patient response to the literature included in the Dot Phrase (i.e. numeric ratings of how helpful it was to the patient, likelihood that they will use these online resources again, etc).

Effectiveness

- Future administration of a patient/provider survey to evaluate:
 - *Patient self-assessment of confidence researching medications before and after exposure to the Dot Phrase.*
 - *Patient assessment of how user-friendly the instructions were in the Dot Phrase.*
 - *Physician confidence in patients to conduct self-guided research in medical information.*

Limitations

- It is very easy to be overwhelmed by the amount of information that is yielded from a simple Google or PubMed search. Patients remain susceptible to finding misleading information.
- Computer/Internet Competency varies from patient to patient. It is important to provide meaningful guidance for conducting individual research while using a simple communication style.

Recommendations for future projects

- If there are positive responses to this additional in the After Visit Summary, this material could be potentially printed and circulated outside of the Hinesburg clinic. This type of information can be shared in local pharmacies and continue to reach patients that may benefit from learning about safe medical research.
- The topics that patients can research from their home computer are vast. Though researching medications are just one facet of home research, many other forms of After Visit Summary Dot Phrases can be designed to help patients research other topics such as:
 - *Vaccinations*
 - *Cancer Screenings*
 - *Chronic Condition Management*
 - *Orthopedic Pain Interventions: Surgery vs. Physical Therapy*

References

1. So BK, Kim PY. Understanding Prescription Drug Advertising. (Updated 2021 Oct 2). In: StatPearls (Internet). Treasure Island (FL): StatPearls Publishing; 2022 Jan-. Available from <https://www.ncbi.nlm.nih.gov/books/NBK574520/>
2. Mongiovi J, Clarke Hillyer G, et al. Characteristics of medication advertisements found in US women's fashion magazines. *Health Promot Perspect*. 2016 Dec 18;7(1):28-33. doi: 10.15171/hpp.2017.06. PMID: 28058239; PMCID: PMC5209647.
3. Mira JJ, Martínez-Jimeno L, Orozco-Beltrán D, Iglesias-Alonso F, Lorenzo S, Nuño R, Pérez P, Toro N, Pérez-Jover V, Gil-Guillen V. What older complex chronic patients need to know about their everyday medication for safe drug use. *Expert Opin Drug Saf*. 2014 Jun;13(6):713-21. doi: 10.1517/14740338.2014.916272. Epub 2014 May 12. PMID: 24821193.
4. Mira JJ, Orozco-Beltrán D, Pérez-Jover V, Martínez-Jimeno L, Gil-Guillén VF, Carratala-Munuera C, Sánchez-Molla M, Pertusa-Martínez S, Asencio-Aznar A. Physician patient communication failure facilitates medication errors in older polymedicated patients with multiple comorbidities. *Fam Pract*. 2013 Feb;30(1):56-63. doi: 10.1093/fampra/cms046. Epub 2012 Aug 17. PMID: 22904014.

Interview Consent Form

- Thank you for agreeing to be interviewed. This project is a requirement for the Family Medicine clerkship. It will be stored on the Dana Library ScholarWorks website. Your name will be attached to your interview and you may be cited directly or indirectly in subsequent unpublished or published work. The interviewer affirms that he/she has explained the nature and purpose of this project. The interviewee affirms that he/she has consented to this interview.
 - *Consented: _X_*
 - *Name: Dr. [redacted], M.D. (Family Medicine Physician, VT)*
 - *Name: Dr. [redacted], Pharm D (Pharmacy Manager, VT)*