Mats Pokela April 18, 2019

POLYPHARMACY

Cures to Reduce Polypharmacy Among Families in the United States

Scope

With nearly thirty-six out of every one-hundred adults in the United States taking five or more medications daily, they can face severe risks that their doctor doesn't even know. Often, patients will come in with problems, but these problems will tend to be side affects of their prescriptions; however, the doctor will miss this key detail and prescribe the patient more medications that can have adverse affects (Hoffman, 2016).

Stats

35.8%

Percentage of adults taking five or more medications in 2015.

16.9%

Percentage of patients taking up to nine medications in 2016.

(Barrett, 2016)



Background

In the modern world, medicine has become extremely helpful, and in some cases, too helpful for ones own good. When doctors prescribe patients too many various prescriptions without checking side-affects, the health of the patient is often in danger. Typically, this occurs when a patient has five or more prescriptions, otherwise known as polypharmacy. As of 2015, around 35.8% of adults in the United States were taking five or more drugs a day, and as of 2016, around 16.9% of adults were taking up to nine medications daily (Barrett, 2016). Polypharmacy is a major issue facing adults across the world, but in the United States, we must take action to help prevent the dangers of unneeded medications among the adult population.

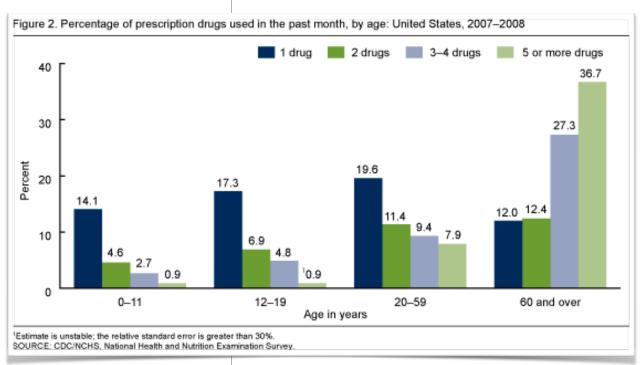
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Importance

In the United States, there is a current generation rapidly approaching their sixties. This is important because the generation from sixty years old and older are vastly more likely to experience polypharmacy (Figure 2 below). Because each case of polypharmcy is so unique, it is distinctly hard to tell what kind of implications polypharmacy hides; however, in all of my research I have found no evidence, no research, and no reasoning to not want to reduce polypharmacy. It negatively affects people all around the world causing death, injury, and financial loss to anyone associated with polypharmacy. I propose that the FDA appropriates funds to conduct more research into pharmacogenetics so that our parents do not have to face the issues polypharmacy provides to our grandparents. These funds would go to the research of more tests and more effective testing to help drive costs down so all people could have access to pharmacogenetic testing.

Policy

As of today, I have found no current policies in the United States regarding polypharmacy and how to combat the issue. However, other countries have began to limit the number of medications doctors can prescribe to patients (Hoffman, 2016.) As alternatives to limiting the number of prescriptions doctors can write, there are three options I would suggest: precision medicine, personalized medicine, and pharmacogenetics. Precision medicine is applying the accuracy and precision of how diagnoses are made and their effectiveness of the drugs chosen. Personalized medicine is a therapeutic approach specified for individuals based on their needs. My recommendation, pharmacogentics, is testing the patients genetic code to see the proper doses, and which drugs to use for a patient based on their genes and conditions (Valdes, 2016). While this is highly effective, it, right now, is also expensive. A person would only need one genetic test done, but because pharmacogenetics is a relatively new practice, new tests may need to be conducted in the future for new drugs (Drug-gene).



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