The Apothecary's Garden: the Plants Behind Modern Medicines

KC Hummer, MS4, University of Colorado School of Medicine at Colorado State University, Fort Collins, CO

INTRODUCTION: Many modern medicines owe their origins to specific plants and their innate compounds. Botanical illustrations detailing such plants and accompanied by instructions of how they may be applied to promote human health date back to the 1st century BCE and have been an important method of preserving and passing knowledge.

OBJECTIVE: To explore and share the ethnobotanical origins of several modern medicines, build new skill in watercolor painting, and dedicate a portion of the author's medical school experience to mindfulness through artistic creativity.

METHODS: Select medicines important to emergency medicine with botanical origins were identified, and a subsequent literature review using PubMed was performed for each. Watercolor illustrations were also created for each species, using line-drawn illustrations and images sourced from Google Images searches as reference material. RESULTS: Watercolor illustrations of eight botanical species relevant to modern medicines were created and published on a Google-based website, accompanied by a detailed description and summary of the ethnobotanical history for each species. The selected species and their associated medications are as follows:

- *Ammi visnaga* (amiodarone)
- Atropa belladonna (atropine)
- Colchicum autumnale (colchicine)
- Datura stramonium (scopolamine)
- *Digitalis purpurea* (digoxin)
- Papaver somniferum (codeine, morphine, oxycodone)
- Salix alba (aspirin)
- Taxus brevifolia (taxol)

CONCLUSION: Many modern medicines have rich ethnobotanical origin stories. Exploring these histories and creating an art series around this effort helped the author better understand the medicinal properties and associated toxidromes for these plants/medicines, as well as promoted general mindfulness and wellness for the author during medical school.