Use of Herbal Medicine to Improve Trust of Amish Communities in Western Healthcare

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Methods

<u>Abstract</u>

Background: Wisconsin is home to the fourth largest Amish population in the USA, with a rapidly growing population exceeding 21,000 in the past year. This is a significant patient population for rural health care providers as most Amish live in rural areas. However, most of the Amish tend to avoid using western medicine and more often use herbal medicine instead, often only coming to a medical doctor in an emergency. By learning more about the herbal medicine practices of the Amish, doctors will be able to provide more culturally competent care to this population. **Method**: We are in the process of sending mailed questionnaires to Amish and non-Amish individuals throughout southwestern Wisconsin. The majority of questionnaires given to the Amish may be distributed by midwives who work with the Amish. 200 questionnaires will be distributed to the Amish, and 1000 to the general population, with a goal response rate of 50% for the Amish and 10% for the general population (n=100 for each). If the goal sample size is not reached for the Amish, one-on-one interviews will be conducted based on the questionnaire. Conclusion: While this project is ongoing, we hope to use the results to help educate doctors working with the Amish on their commonly used herbal medicines in order to provide more culturally competent care, leading to improved trust and better health outcomes.

Objectives

- 1) Determine what herbal remedies the Amish most frequently use as well as their most common indications.
- 2) Describe the herbs most commonly used along with research related to benefits and risks from these herbs.
- 3) Educate rural health care providers on these practices in order to make the Amish feel less judged by health care providers.
- 4) Create a pamphlet describing the herbs most commonly used along with known drug interactions that the Amish could bring with them to a health care provider as needed.

Setting: Southwestern Rural Wisconsin

Participants: A cross-sectional study of Amish individuals and non-Amish individuals as a comparison group.

Objective 1: Quantitative Survey

Recruitment: Non-Amish addresses to be identified from local directories and phone books, participants mailed questionnaire packets; Surveys for the Amish will be distributed by midwives and birth attendants who work with and/or are members of Amish communities.

Informed Consent: Each questionnaire packet consists of an introductory letter, consent form, questionnaire, and stamped return envelope;

participants fill out the consent form and questionnaire and mail both back to Monroe Clinic in Albany. Only surveys returned with completed informed consent forms will be used for analysis.

Questionnaire: Includes questions about herb use, experiences with western health care, and demographics.

Data collection: Completed packets will be scanned onto a password-secure computer and the hard copy will be shredded.

Study Size: 100 participants from each group, total N-200

Statistical Methods: Data analysis will be performed via SPSS using t-tests, Chi square tests, logistical regressions and other comparison methods.

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Figure 1: This is the survey created by Beth Klein which we have been distributing to both Amish and non-Amish populations.

Objective 2: Herbal Medicine Literature Review

Herbs more commonly used by the Amish communities identified in Objective 1 will be studied and reviewed. The goal is to examine the reasons and methods by which these herbs are used and to provide any scientific evidence that supports or does not support this claim.

Objective 3: Educating Rural Health Care Providers

This objective builds upon the first two objectives to provide actionable recommendations for western providers to improve their care for Amish patients. Educating rural physicians and providing actionable recommendations is critical for the Amish to receive any benefit from this project. Providers knowing the specific herbs commonly used by their patients not only helps build a relationship of trust and understanding, but also helps prevent possibly harmful drug interactions.

For example, we know that St. John's wort may reduce the efficacy of many medicines, including antidepressants, cyclosporine, digoxin, HIV drugs including indinavir, warfarin, and many more medications (NCCIH).

We intend achieving this objective through publishing our research and recommendations, as well as presenting at research conventions for rural providers.

Objective 4: Creating a Pamphlet

This will be the final objective and builds on all the previous objectives. While educating rural health care providers will be important, it is unlikely that we will be able to reach all providers who work with the Amish in Wisconsin. Therefore, creating something tangible which the Amish could bring with them explaining what they use along with research-supported benefits and risks to these herbs, especially related to possible drug interactions.

Dr. David Kiefer has previously made a similar pamphlet for the Latinx population of Madison based on a similar study he had performed with that population.

Where are we now?

We are currently in the process of receiving returned surveys. We are anticipating needing a second round of surveys distributed to the Amish to be sent out in November to ensure that we receive the returns we want. Once we receive enough surveys to begin understanding the results, we will be working on literature review and creating our pamphlet.

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Figure 2: St. John's Wort, an herb historically used for the treatment of depression. (Vickers, 2018)



Figure 3: Species of *Echinacea*, a plant thought to be useful for the prevention and treatment of the common cold. (Vickers, 2018).