The Geriatric Medication Game©

by Patrick E. Fontane and Stephanie Seaton

Explanation

The *Geriatric Medication Game*© is a structured role-playing experience wherein participants encounter the health care system of the United States in relation to older persons through medication and medication-related situations.

The game requires acquiring materials and preliminary set-up activity. It has been designed for approximately 30 participants. Length of playing time is flexible and can be determined by the person organizing play.

The object of the game is to accumulate points for passing "challenges" located at six stations, by drawing from a deck of game cards, or being alert to spontaneous opportunities during play.

History

The *Geriatric Medication Game*© originated at St. Louis College of Pharmacy in 1991. Dr. Carol Oliver, associate professor of English, developed the game as a tool to improve students' and professionals' understanding of problems confronting older persons and the factors affecting their use of medications. Off-campus interest in the game was kindled by presentations at professional meetings and workshops. In 1992, the game was copyrighted to St. Louis College of Pharmacy. The game was distributed between 1991 and 1995 on a limited basis. By 1996, the content of the game had lost some of its contemporary relevance. At that time, promotion and distribution ceased.

In spring 2002, the Office for Research on Aging at St. Louis College of Pharmacy assumed responsibility for the *Geriatric Medication Game*©. A team composed of members from the College faculty revised the content and made appropriate updates. The revised game was once again included in the curriculum of the professional communications course. Students and faculty reported positive experiences after playing. The structure and content from the spring 2003 experiences, was produced for distribution. During 2009, content and situations of the game were updated and revised. Two stations were replaced, and a third was re-conceptualized; station challenges were replaced as were some station cards; and Medication Cards were updated and now include herbal/natural product scenarios.

The experiential and informational content of the game are periodically reviewed to maintain currency. Appropriate revisions reflecting changes in medications and health care services will be made available as it is updated.

Any profits from the *Geriatric Medication Game*© will be applied to programs sponsored by the Office for Research on Aging.

Playing the Game

The person who assumes responsibility for organizing the game must review and become familiar with its manual prior to play. Space and time decisions must be made. Approximately 15 minutes should be included in playing time frame for general instructions and for post-game debriefing. Seven non-playing persons are required - one for each of six stations of activity, and one assigned to "float" among the players to distribute Medication Cards. Usually this person will be the game's organizer.

Small items to be used as props must be collected (e.g. an empty soft drink bottle) or purchased (candy to be used as "pills") to enhance the role-playing experiences. Most of these items are conveniently available at a pharmacy. Some items (e.g. arm slings) may be fabricated and used repeatedly.

Instructions for the game establish the framework for initiating and maintaining play. Once initiated, the game maintains itself until it is stopped.

Assessment

Most organizers use a pre- and post-test format to assess the effects of the *Geriatric Medication Game*©. Local game sponsors should conduct a debriefing at the conclusion of play to emphasize and possibly elaborate on some of the observations and experiences of the participants.

Summary Assessment of the Geriatric Medication Game©
By Shane Austin

During the fall 2009 semester, approximately 79 students at St. Louis College of Pharmacy participated in *The Geriatric Medication Game*©. These players used a pre- and post-test to evaluate changes in reported perceptions toward older persons. The pre-test was administered several days before playing the game*;* the post-test was given immediately after playing the game. Both assessments used the same 12 items scored by a Likert scale of one to five (strongly agree, agree, neutral, disagree, and strongly disagree, respectively). Additionally, the post-test asked for players' emotional responses with six specific emotions (anger, frustration, sadness feeling withdrawn, anxiety, and helplessness), again by a five-point Likert scale (from very strong to not at all, respectively one to five). Several general items assessed players' self-perceived changes regarding understanding health system challenges facing older persons. These responses were indicated in the same fashion as the emotional responses. The data set was reduced to N=72 by including only those aged 19-21 to reflect similar perceptions and life experiences.

Table 1 – Selected Means of Perceptions of the Elderly Affected by the Geriatric Medication Game©**

	Pre-Test	**Post-Test**
An adequate amount of attention is focused on geriatric health issues in the United States.	3.280	2.822*
It is important for health care providers to understand their geriatric patients' family circumstances and social environments.	4.387	4.507*
Visual impairment makes it difficult for older patients to take their medications properly.	4.267	4.726*
Geriatric patients can successfully utilize the health care system in this country.	2.707	2.548*
Geriatric patients can successfully utilize the pharmacy system in this country.	2.880	2.616*

*Difference of means test significant at < 0.015

**Means based on a Likert scale: 5 = Strongly Agree…1 = Strongly Disagree

One of the desired outcomes of the game is to expose players to the daily routines and problems of elderly persons, so players can better understand geriatric patients. A difference-of-means t-test was used to compare pre- and post-game perceptions of older persons. **Table 1** contains the five perceptions that were affected most by the game.

The most strongly recognized emotion reported having occurred during the game was frustration with almost 96 percent of participants reporting they felt frustrated, and 62.9 percent ranked their frustration as strong or very strong. Almost 2 out of 5 players (38.6 percent) reported no feelings of sadness making it the least felt emotion among participants (**Table 2**). Players wrote that during the game they also felt annoyed, anguish, disrespected, and taken advantage of.

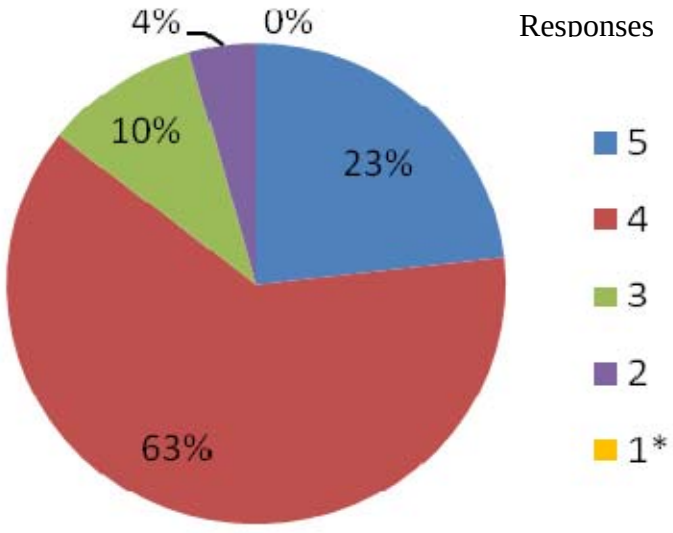
Table 2 – Means of Emotions Experienced While Playing the Geriatric Medication Game©*

	Anger	Frustration	Sadness	Withdrawn	Anxiety	Helplessness
Mean	2.896	3.726	2.274	2.685	2.836	3.583

*Means based on a Likert scale: 5 = Very Strong… 1 = Not At All

All participants increased their awareness, empathy, and understanding of elderly patients. More than four out of five players (85 percent) stated the game increased their empathy towards geriatric patients in the health care and pharmacy systems. **Chart 1** presents percentages for "Increased empathy … in the pharmacy system" at each level of the scale. Three of every four players reported their "Improvement in understanding of how to help elderly patients in our pharmacy system" was strong or very strong.

Chart 1 - How Strong Empathy for Geriatric Patients in Our Pharmacy System Increased After the game**



*No respondents selected 1

**Means based on a Likert scale: 5 = Very Strong… 1 = Not At All

"It [the game] *has helped me realize how frustrating it can be as an elderly person. I think I better understand the challenges they face and will better empathize with them."*

- *Player*

The 2004 version of the game significantly affected players' perception of health care and pharmacy issues encountered by older persons in the society.[1] **Table 3** compares the two versions of the game using the means obtained in fall 2008 (2004 issue was used at the College) and fall 2009 (first year the 2009 version was played by classes). The lack of significant differences between these indicators indicates a consistency between these versions of the game. All statistical means continue to move toward desired responses in the fall 2009. The difference of means (between the two versions) was statistically significant only for the "increase in empathy for geriatric patients in our pharmacy system," reflecting a strengthened affect of this reported perception.

Table 3 – Fall 2008 and 2009 Means of Self-Perceived Influence of the Game**

	Fall '08 Means	Fall '09 Means
Increase in awareness of problems encountered by geriatric patients in our health care system.	3.622	3.806
Increase in empathy for geriatric patients in our health care system.	3.838	4.069
Increase in empathy for geriatric patients in our pharmacy system.	3.739	4.028*
Improvement in understanding of how to help elderly patients in our health care system.	3.649	3.861
Improvement in understanding of how to help elderly patients in our pharmacy system.	3.694	3.931

*Difference of means t-test significant $p < 0.05$

**Means based on a Likert scale: 5 = Very Strong… 1 = Not At All

"I truly enjoyed this game. It was neat to experience what it would be like to be a geriatric patient."

- *Player*

Please continue to obtain ordering information.

[1] Stephanie Evans, Maria Lombardo, Myra Belgeri, & Patrick Fontane. (2005). The Geriatric Medication Game in Pharmacy Education. *American Journal of Pharmaceutical Education, 69*(1-5), 304.

Ordering Information

The *Geriatric Medication Game*© package includes:
- an instruction manual, which includes a specific list of items to be acquired, role playing "hints" for persons assigned to the Game stations, possible variations of play, master forms of Patient Profile Sheets, player labels to photocopy, and other suggestions

- a deck of Medication Cards specifying medication-related situations

- six decks of Station Cards appropriate to each station of the game

- Challenge Cards appropriate for role-playing at each station

- a reusable, labeled carton in which to store the *Game* when not in use.

The cost of the *Geriatric Medication Game*© is $60. Please add $5 (total =$65) for First Class USPS. All orders must be pre-paid. Checks should be made payable to: St. Louis College of Pharmacy. We cannot process bankcards or invoices for purchase.

Please send orders* to:

Office for Research on Aging
St. Louis College of Pharmacy
4588 Parkview Place
St. Louis, Missouri 63110

* Orders should have a contact person and complete shipment address. Notice of shipment will be sent if an e-mail address is provided.

Prior purchasers may contact Dr. Patrick Fontane at 314.446.8447, or pfontane@stlcop.edu, for special pricing information through June 30, 2010.