Using Town Meetings to Teach the Values Inherent in Health-Care Resource Allocation Decisions

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ABSTRACT. Difficult decisions regarding the allocation of scarce health-care resources will need to be addressed if significant changes are to be made in the American health-care system. Several states have begun such a process by providing a forum where citizens can participate in a serious discussion about these difficult choices and trying to determine what citizens find valuable and desirable about health-care services. The underlying goal is that health-care reform will be congruent with community values. As future practitioners, pharmacy students need to understand these difficult decisions and the role of thoughtfully considered values in the decision making process. The purpose of this study was to utilize a town meeting approach for students to thoughtfully consider and discuss their values concerning health-care resource allocation and to evaluate the student acceptability of such a process. Students from two different classes participated and rated the process positively in regards to the amount of learning and understanding that occurred, were generally satisfied with the process and found the meeting valuable to attend.

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INTRODUCTION AND PURPOSE

The inclusion of ethics in the pharmacy curriculum is gaining popularity. Several authors have examined the role of ethics in pharmacy education and strategies for teaching the subject material (1). Many current issues in pharmacy and the greater health-care system require ethical contemplation. Examples include the professional duty of pharmacists, confidentiality of patients, provision of contraceptive services to minors, withdrawal or withholding of treatment, and the allocation of scarce health-care resources. These are ethical issues because they present the practitioner with a moral dilemma, a situation that occurs when there are moral reasons for taking two opposing courses of action (2). The dilemma requires the practitioner to make a decision of what course of action to follow. These decisions can be classified into three levels:

> *The aggregate level:* Decisions at the national or regional level about the allocation of resources to health care as a whole or for particular categories of patients.
>
> *The intermediate level:* Decisions about allocation of existing health-care resources within health-care systems, health plans and institutions such as hospitals, clinics, health centers.
>
> *The individual level:* Decisions made within health-care institutions, including those decisions made primarily at the bedside. (3)

These decisions can be restated with terms familiar to pharmacy. The aggregate and intermediate levels involve policy decisions, while those decisions at the individual level are clinical decisions. Clinical ethics is a type of moral thinking that governs the relationship between the provider and the patient in the delivery of patient care and influences clinical decision-making. Examples include whether or not to dispense a placebo to an unknowing patient or the disclosure of information that may violate a patient's confidentiality. Codes of ethics are also classified under the heading of clinical ethics. Policy ethics has a broader scope and deals with the macro allocation of health-care resources. It governs the nature of the

system, the distribution of goods and services to the members of a society within the system, and affects policy decisions. Policy ethics strongly influences the environment in which clinical ethics takes place, essentially forming a framework. Therefore, it is necessary for future pharmacists, as patients and as practitioners, to not only understand the decisions involved in clinical ethics, but also to have an appreciation and understanding of the policy ethics that shape the environment in which they will practice.

Both clinical ethics and policy ethics require persons to examine their values as individuals and as members of a larger group or society. Values have an extensive impact on ethical decisions at all three levels described above. Values primarily affect decisions in three ways:

> *Values frame the problem.* We "see" a problem (or fail to see it) on the basis of the values we apply to the situation.
>
> *Values supply alternatives.* The alternatives that we consider as possible resolutions for a problem are determined on the basis of the values we apply to our potential actions.
>
> *Values direct judgment.* The judgment on the basis of which a problem is resolved is framed by the values we wish to uphold or promote. (4)

Much like the three levels of decisions described above, decision-makers have individual values, intermediate values (as a member of a family or a profession) and aggregate values (as a member of society). Because of the complex nature of one's values system and the difficulty of ethical decisions, decision-makers need to consider their values-framework when resolving ethical dilemmas. The arrival at values requires reflective and deliberative thinking. Values clarification is a process by which individuals come to understand what values they hold and the importance of each of those values relative to others (4). Formal methods of classroom education, while useful in presenting some of the principles and theories of ethical thinking, make it difficult for students to actively participate and hence to actively contemplate and clarify their values. One solution is to use small-group discussions coupled with a report of

each of these groups to a larger group. This study utilized such an approach following a format similar to a town meeting. The purpose of this study was to use and evaluate a town meeting format as a means for students to thoughtfully consider and discuss their values concerning policy ethics and the ethics of health-care resource allocation. Furthermore, the study sought to evaluate the student acceptability of such a method.

BACKGROUND AND IMPORTANCE

The current problems of cost, access, and quality in the American health-care system are well-documented. National health expenditures (NE) were $751.8 billion in 1991 comprising 13.2% of the Gross Domestic Product (GDP) (5). By the year 2000, NE are predicted to rise to $1.7 trillion and to consume 18.1% of the GDP (6). Per capita, the United States spends more money than any other industrialized nation, but still claims 37 million uninsured citizens, about 14% of its population. The United States is the only western country that does not guarantee universal access of some type to its citizens (7). Finally, despite high health-care expenditures, the United States does not perform any better (worse in some cases) than other nations in terms of gross health outcome measures (8). In addition, advances in biomedical science and technology have led to the development of health-care services that are of questionable quality and/or outcomes when both costs and benefits are evaluated.

The problems of cost, quality, and access have led to many proposals to reform or reshape the system. However, the root problem lies at a deeper level and fails to be addressed; that problem is the confusion and disagreement about the values underlying our health-care system. For instance, Priester argues that most health-care reform efforts are simply "quick fix financing solutions [that] ignore or uncritically adopt the current framework of values underlying our health-care system" (7). The strong American beliefs of individualism and autonomy have helped shape the current values framework operating within the United States. This values framework, according to Priester, has subordinated the value of fair access to those of provider autonomy, patient autonomy, and consumer sovereignty, leading to a large number of uninsured Ameri-

cans. Furthermore, while the current values framework includes high-quality care, it is only within recent years that quality has begun to be evaluated on outcome, rather than structure and process.

This confusion over which values should shape the health-care system and the apparent impossibility of developing a strategy to reform the system point to the need to clarify our health-care values; to explicitly define what "is thought to be good or desirable in our health-care system" (7). Once we agree on what is valuable and desirable about our system, efforts at reforming the system to reflect those values will be more effective. Therefore, any health-care reform effort requires an explicit values framework in order to make the tough decisions that we face. Dougherty claims that health-care reform "ought not to proceed merely on the basis of self interest, [but] ethical values should play a key role in the debate" (9).

The primary dilemma facing the American health-care system is how to meet unlimited wants and demands with limited resources. Growing demands coupled with limited resources to meet these demands have forced us to recognize that difficult decisions need to be made regarding the allocation of these scarce resources. Developments in medical science and technology have created choices grounded in social and personal values (10). These decisions require more than a debate about the political and economic factors involved. Again, a clear values framework is needed in making allocation decisions. It is important to think clearly and candidly about these decisions before the problems present at the clinical level. Much can be accomplished by the education of health-care professionals and the general public about the nature of these difficult decisions and the need to gather their input to resolve these problems (3).

Debates regarding these decisions must take place outside of the traditional "vertical" communications–leaders talking to people and occasionally people getting to talk back to their leaders (11). The debate needs to be on a lateral level–citizens talking to citizens (a participatory democracy) regarding what they value about health care. In order to establish such a forum, to explore the values of citizens and educate them about the tough choices that needed to be

made, the Community Health Decisions movement was begun. Starting in 1983, a grassroots citizen education group, Oregon Health Decisions, began a series of public meetings throughout Oregon to discuss personal and societal choices growing out of modern medicine and the rising costs associated with health care (12). The primary goal of this group was to make health-care delivery more congruent with community values, with the underlying objective that "society must decide" (13). Oregon Health Decisions played a key role in the state's health-care reform efforts, conducting 47 community-meetings throughout Oregon in 1990 to generate statements about what makes health care important to the citizens as a common good. These statements were passed on to the Health Services Commission, which was responsible for developing the prioritized list of health services (14).

After Oregon's initial experience, community health decisions movements began in several other states, including California, New Jersey, Vermont, and Colorado, among others. In 1988, American Health Decisions was founded and currently serves as a national consortium of the growing state efforts to organize their citizens to become more actively involved in health-care decisions. The mission of this group is to promote "community education and discussion to enhance understanding of ethical issues in health care and to promote direct involvement of citizens in personal, institutional, and societal decisions about health-care issues" (15). This goal is congruent with the democratic ideal of including the public's values and input in the decision-making process. Policy makers need public input and public information to make the difficult decisions regarding the allocation of health-care resources.

A primary question that needs to be addressed is what means should be used to attain the public values and input (13). If conducted properly, a reliable mail or telephone survey (opinion poll) can claim scientific validity. However, surveys fail to achieve an important goal that the community health decisions movement can offer. By providing a forum where differing points of view can be heard and discussed, questionnaires following health decision meetings tend to reflect opinions that have been informed and shaped by participating in a serious discussion of health-care issues (12).

As pharmacy students enter into professional practice, it is impor-

tant that they understand the problems faced by our health-care system and the ethical dilemmas that are created out of these problems. As a part of the greater health-care system, pharmacy students need to recognize some of the difficult decisions facing the system regarding the allocation of scarce health-care resources. These difficult decisions require people to clarify what their values are and which values are more important than others. An understanding of the ethical principles and theories underlying ethical decisions is important and can be taught through a lecture format, but it is only through introspection and active participation in discussions that students can thoughtfully consider their values concerning health-care resource allocation. This type of activity is not conducive to the traditional classroom lecture approach.

METHODS

First- (P1) and fourth-year (P4) students in a 0-5 pharmacy program were utilized in this study. These groups were chosen because they represent the oldest and youngest students enrolled in classes on campus when the study was conducted. Additionally, fourth-year students have been exposed to a number of years of professional education, while the first-year students are new to the professional degree program. Because of these factors, we were interested in determining if the groups differed.

An announcement was made during a class in which the majority of P1 students were enrolled. A similar announcement was made during a class of P4 students. Separate town meetings were conducted with students from the P1 class and the P4 class. There were two meetings held for each class, for a total of four meetings. Participants were self-selected and were offered no incentive to attend.

The meetings were intended to be two hours in length. They were held in the evening in the student union. The agenda for the evening was structured, with several exercises for the students to complete individually and in small groups.

The meetings began with a welcome and introduction of both the presenters and the participants. The purpose of the meeting was then explained to the students, stressing the importance of policy

ethics and values in the changing U.S. health-care system. Values were defined to the students as the properties of health-care services that make those services desirable, useful, or valuable to us. Furthermore, it was explained to the students that there were no right or wrong values and this meeting did not seek to change their values but merely to help clarify them. Because each student entered the meeting with a different knowledge about the problems facing the U.S. health-care system, a short overview was presented. This overview outlined the problems of cost, quality, and access and pointed out to the students that within the system there are unlimited wants with limited resources.

Following the presentation, each group was shown a videotape entitled "Critical Choice," which outlined a difficult resource allocation decision facing a hospital administrator. Although the video was filmed in Canada, the issues presented are still very relevant in the United States. The situation faced by the administrator concerns whether to pay for a young girl to go to the U.S. for a liver transplant or spend the money on a program to prevent Sudden Infant Death Syndrome that could save up to 15 babies. This type of decision is faced by legislators every year when deciding the Medicaid budget. The video ended with the administrator about to reveal his decision. The floor was then opened for discussion about what the students would do if they were the hospital administrator.

The groups were then instructed to begin Exercise 1. This activity consisted of individually prioritizing six short health-care situations on the basis of which services were most important for a health-care system to provide (Figure 1). The students were also asked to provide reasons for the rank they assigned to a scenario. Each situation involved varying ages, medical problems and values.

After individually completing this exercise, the participants were divided up into small groups and were asked to come to a consensus about the prioritization of the scenarios. The groups were once more asked to provide reasons for their rankings. The floor was again opened for discussion and each group reported where they ranked the scenarios and provided their reasoning. The reasons were recorded on an overhead projector. It was pointed out to the students that the reasons they provided for justifying the rank of each case were their health-care values.

FIGURE 1. Health-Care Scenarios Discussed in Exercise 1.[a]

1. A 45-year-old mother of two teenagers has breast cancer that has spread to other parts of her body; her health is declining rapidly. The only possible treatment left is a long, very expensive, and debilitating course of chemotherapy that offers a 20% chance of prolonging her life expectancy by a few months and perhaps a 2% chance of extending it a year or two.

2. A 60-year-old man has mild abdominal pain. His doctor does the usual examinations and finds no serious problem–it's probably a form of indigestion. "Are you sure it isn't cancer?" he asks. "Very unlikely," the doctor replies, "but we can take a CT scan to make sure." The CT scan has a 1/1000 chance of finding a cancerous lesion. Such a cancer, if found, is probably not successfully treatable.

3. A 25-year-old man is in a car accident. He has a collapsed lung and internal bleeding as a result. Surgery to repair the lung and take care of the bleeding is likely to be successful; giving less treatment may cause death or permanent damage.

4. A 70-year old woman with heart disease and arthritis has a cardiac arrest at the nursing home where she lives. An ambulance is called and emergency procedures begun. The patient is transported to the hospital and admitted to intensive care where she is supported with mechanical ventilation and medication to sustain her blood pressure. Fewer than 2% of such patients can be predicted to survive if they have a cardiac arrest even with prompt emergency procedures and intensive care.

5. A 1-year-old child has not received any of her scheduled immunizations. Routine immunizations for children can prevent polio, diphtheria, and whooping cough, among others. Without immunization, the child may contract these diseases and spread them to other children.

6. A 55-year-old man is severely depressed. He is suffering with frequent headaches and severe fatigue that force him to stay home from work. Because of his illness, he has missed a number of important meetings, has been passed over for promotion and is in danger of losing his job. He is withdrawn at home, and his relationships with his wife and children are deteriorating. Outpatient counseling and treatment with antidepressant medication could begin to restore him to normal functioning in a month to six weeks time.

[a]Adapted from Vermont Health Decisions: Priorities for the 90's (Vermont Ethics Network, 89 Main Street, Drawer 20, Montpelier, VT 05620).

Exercise 2 allowed the groups to further explore the notion of values. The goal was to come up with a consensus of the top health-care values of the large group. Participants were given a list of 16 values (Figure 2) and were asked to individually rank them as either ordinary or special. While all values are important, some are

FIGURE 2. Values Ballot Utilized in Exercise 2.[a]

Relieves pain.	Symbolizes community compassion.
Extends length of life.	Supports equality of opportunity in society.
Maintains/improves productivity.	Supplies information needed to relieve worry.
Maintains/improves ability to think and reason.	Supplies information needed to plan life rationally.
Maintains/improves mental health.	Has a high benefit to cost ratio.
Maintains/improves capacity for personal relationships with family and friends.	Benefits many members of society.
Maintains/improves quality of life.	Maintains/improves physical functioning.
Maintains/improves capacity for independence.	Prevents other illness.
Other	

[a]Adapted from Vermont Health Decisions: Priorities for the 90's (Vermont Ethics Network, 89 Main Street, Drawer 20, Montpelier, VT 05620).

simply more important than others. The more important values were to be marked as special. Students were given the opportunity to add any other value they could think of to the list. A vote was then taken and those values without a majority of special votes were dropped from the list. The students were then instructed to pick three values from the remaining list, in no particular order. A vote was again taken and the values receiving the most votes became the top values for the group.

For Exercise 3, students were instructed to assign a priority to particular services or type of care as to whether it should be included in a basic health services package on the basis of their top values from the previous exercise (Figure 3). A basic health service was defined as a service that every person in the community can receive at no or low cost, and we–as a community–are willing to pay for the service through premiums and/or taxes. After voting individually, the floor was opened for discussion, with students stating the reasons for placing services where they did.

FIGURE 3. Exercise 3–Basic Health Services.

A "basic health service" is defined as a service that every person in the community can receive at no or low cost, and we–as a community–are willing to pay for the service through insurance premiums and/or taxes.

Priority 1 = This is definitely a "basic health service"
Priority 2 = This is probably a "basic health service"
Priority 3 = This is probably not a "basic health service"
Priority 4 = This is definitely not a "basic health service"

Critical Care–Care for acute life-threatening conditions

_____ a) Organ transplants
_____ b) Open-heart surgery
_____ c) Heart attacks and stroke
_____ d) Neonatal intensive care
_____ e) Trauma and emergency care
_____ f) Severe burn care

Long-term Care–Care for chronic or disabling conditions

_____ g) Nursing home care
_____ h) Home health care
_____ i) Hospice care
_____ j) Adult day health care

Short-term Care–Care for acute, non life-threatening conditions

_____ k) Visits to physicians
_____ l) Visits to mental health professionals
_____ m) Prescription drugs
_____ n) Urgent care
_____ o) Brief hospitalizations
(for conditions such as: earaches, broken bones, infections, childbirth, gallbladder problems, ulcers, backaches, hernias)

Preventive Care–Prevention or early detection of ill health

_____ p) Immunizations
_____ q) Maternity and well-baby care
_____ r) Well-child care
_____ s) Physical exams
_____ t) Screenings (for cancer, blood pressure, cholesterol)

Following the exercises, students were asked to share any concerns about their values list or other problems with the process. Students were then instructed to complete a values survey, which was an attempt to quantify their values. The survey included items that dealt with various topics, including: access to health-care services, efficiency, rationing, personal responsibility, government involvement in health care, and the importance of certain health-care services.

Finally, an evaluation form was distributed for the students to complete. The questions on this evaluation form were later grouped into three categories based on content and reliability. These categories and questions are shown in Figure 4. Both the survey and the evaluation were scored on a five-point scale, with 1 = strongly agree, 3 = undecided, and 5 = strongly disagree. All statistical analyses were performed using the Statistical Package for the Social Sciences (SPSS).

RESULTS

Exercises

A total of 15 first-year (P1) and 16 fourth-year (P4) students attended the values meetings. Exercise 1 and 3 produced no quantifiable results and were used primarily as an effort to start discussion and to have students begin to consider, as individuals and as members of a small group, the difficult decisions involved in health care. The results of the values vote in Exercise 2 are found in Table 1. Although there were some differences between the groups, P1's and P4's both ranked "maintaining and/or improving quality of life" and "benefits many members of society" as important values for the health-care system to provide.

Values Survey

The student responses from several items in the values survey are found in Table 2. Means and standard deviations are shown for P1's and P4's, in addition to the entire group. The questions were grouped by content into five categories for efficiency in presentation. Statistically significant differences ($\alpha < 0.05$) between the two

FIGURE 4. Evaluation Instrument.

CATEGORY Questions
LEARNING AND UNDERSTANDING
From this meeting I better understand why a national health insurance program may not include every health service.
From this meeting I better understand the allocation decisions facing the health-care system.
From this meeting I better understand the dilemma between high cost and limited access to services.
From this meeting I better understand why some people favor limiting the types of services that are paid for by public funds.
SATISFACTION WITH THE PROCESS
I am satisfied with the choices of my small discussion group regarding the cases
I believe that other members of my small discussion group were satisfied with the choices we made regarding the case.
I am satisfied with the values that the group chose during the voting process.
I believe that other members of the group were satisfied with the values that we chose during the voting process.
VALUE OF THE MEETING
I feel that my attendance at this meeting was valuable.
This meeting was worth my time to attend.
I would recommend that my friends and classmates attend this meeting.

classes were found on two items. In both cases, the difference was in the strength of opinion rather than the direction of response.

In this study, the values survey was used primarily as a tool to quantify the results of the discussion that the students participated in during the meeting. The responses should reflect some of the serious discussions that took place. While not done during this

TABLE 1. Summary of Top Values from Exercise 2 for Each Class.[a]

	P1		P4	
Value	Number of meetings chosen as one of the top 3 or 4 values	Number of meetings receiving a majority of votes as special	Number of meetings chosen as one of the top 3 or 4 values	Number of meetings reveiving a majority of votes as special
Maintains/improves quality of life.	2	2	2	2
Benefits many members of society.	1	2	1	1
Has a high benefit-to-cost ratio.	0	2	2	2
Prevents other illnesss.	2	2	0	2
Relieves pain.	0	1	2	2
Maintains/improves mental health.	0	2	1	2
Maintains/improves ability to think and reason.	1	2	0	1
Extends length of life.	0	1	0	2
Maintains/improves capacity for personal relationships with family and friends.	0	1	0	2

Maintains/improves physical functioning.	0	1	0	2
Supports equality of opportunity in society.	0	1	0	1
Maintains/improves capacity for independence.	0	0	0	1
Supplies information needed to plan life rationally.	0	0	0	1
Maintains/improves productivity.	0	0	0	0
Symbolizes community compassion.	0	0	0	0
Supplies information needed to relieve worry.	0	0	0	0

[a]Two meetings were conducted for both the P1's and P4's. Students were first asked to rate each value as special or ordinary. Of those values receiving a majority of special votes, students were instructed to choose the three most important.

TABLE 2. Summary of Student Responses to Values Survey.[a,b]

CATEGORY Question	Total Mean (S.D.) (n = 31)	P1 Mean (S.D.) (n = 15)	P4 Mean (S.D.) (n = 16)	p-value
Ability to pay and fair access as a value				
If a hospital becomes overwhelmed with patients who cannot pay, public funds from taxes should be made available to cover the cost of care.	2.55 (0.93)	2.47 (0.99)	2.62 (0.89)	0.642
Expensive, life-saving technology should be denied when a person lacks the ability to pay.	4.30 (0.53)	4.53 (0.64)	4.07 (0.26)	0.017*
In the U.S., people should receive basic health care even if they cannot pay for it themselves.	1.90 (0.88)	1.73 (0.59)	2.07 (1.10)	0.313
A hospital should be allowed to refuse treatment to a patient if he/she cannot afford to pay for it.	3.90 (0.66)	4.07 (0.46)	3.73 (0.80)	0.175
Public funds from taxes should be spent to provide basic health care for everyone rather than for the development of expensive medical equipment	2.00 (0.83)	1.86 (0.36)	2.12 (1.09)	0.365

The role of rationing and efficiency as a value				
In deciding whether or not to provide needed medical treatment, the cost of treatment should never be one of the concerns.	2.87 (1.34)	2.53 (1.46)	3.19 (1.17)	0.177
The patient's quality of life should be considered when deciding whether he/she should be kept alive with a breathing machine or by tube feeding.	1.35 (0.75)	1.33 (0.62)	1.38 (0.89)	0.881
We should be more selective in deciding who qualifies for transplants. (For instance, should an alcoholic be considered for a liver transplant?)	2.61 (1.20)	2.53 (1.19)	2.69 (1.25)	0.728
Age is an important consideration in determining who should receive an organ transplant.	2.63 (1.13)	2.60 (1.06)	2.67 (1.23)	0.875
If I had to make a choice on how health-care dollars are spent, I would choose that the young be treated before the elderly.	2.52 (1.09)	2.27 (1.03)	2.75 (1.13)	0.224
Personal responsibility as a value				
People over the age of 65 and covered by Medicare should be expected to pay a greater share of their medical costs according to their ability to pay.	2.20 (1.03)	2.27 (1.16)	2.13 (0.92)	0.730
People who smoke and drink should pay higher insurance rates.	1.67 (0.88)	1.73 (0.96)	1.60 (0.83)	0.687

(continued)

CATEGORY Question	Total Mean (S.D.) (n = 31)	P1 Mean (S.D.) (n = 15)	P4 Mean (S.D.) (n = 16)	p-value
The role of government regulation and taxes				
Even if I have to pay more taxes, I think the government should pay for health care for everyone who cannot afford it.	2.81 (1.17)	2.73 (1.10)	2.87 (1.26)	0.742
I would vote for a greater share of taxes to be given to health care for everyone even if it would mean less money would be available for other government programs (e.g., highways, education).	2.90 (1.16)	2.53 (1.06)	3.27 (1.16)	0.082
The government and/or insurance carriers should determine how long a patient should stay in the hospital based on his/her illness.	3.83 (0.95)	3.93 (0.80)	3.73 (1.10)	0.574

The importance of specific services				
Insurance should pay for the care of patients at home, not just in hospitals and nursing homes.	2.00 (0.87)	2.33 (0.90)	1.67 (0.72)	0.034*
I would be willing to pay more taxes so that more people could receive long term health care.	3.13 (0.90)	3.13 (0.83)	3.13 (0.99)	1.000
As a taxpayer, I would vote to spend more money to provide prenatal care for pregnant women.	2.23 (1.06)	2.07 (0.88)	2.37 (1.20)	0.426
My tax dollars should be used to prevent disease rather than to keep people alive for a longer time.	1.84 (1.00)	1.87 (0.92)	1.81 (1.11)	0.884
Public funds from taxes should continue to be spent on artificial organ research such as the artificial heart.	2.74 (0.89)	2.73 (0.88)	2.75 (0.93)	0.960
Taxes should continue to be used to pay for the 24-hour-care needed to keep patients who are permanently unconscious on life-support machines.	3.81 (1.08)	3.87 (1.06)	3.75 (1.13)	0.769
If I had to make a choice on how health-care dollar are spent, I would choose that those who could get well should be treated before those who have incurable diseases.	2.06 (1.15)	1.93 (1.16)	2.19 (1.17)	0.549
My tax dollars should be used to pay for health-care services for AIDS patients who cannot pay for it themselves.	2.94 (0.96)	2.80 (0.94)	3.06 (1.00)	0.458
As a taxpayer, I would vote to spend more money on preventive education and research to cure AIDS even if it means there is less money for other health programs.	2.71 (1.13)	2.80 (0.94)	2.63 (1.31)	0.674

[a] Adapted form California Health Decisions, 505 South Main Street, Suite 400, Orange, CA 92668.
[b] Items measured on a five-point scale with 1 = strongly agree, 3 = undecided and 5 = strongly disagree
* significant difference $\alpha < 0.05$

process, it may be useful to share the results of the survey with the students following the meeting. This presents another opportunity to have an open discussion about some difficult decisions presented by the health-care system.

Several findings from the students' responses could generate discussion in a future meeting. In the category of "ability to pay and fair access as a value," the students generally agreed that people should receive basic health care, even if they cannot pay for it themselves. With respect to "the role of rationing and efficiency as a value," students more strongly agreed that quality of life should be a factor when making health-care decisions rather than either the patient's age or the cost of the treatment. (This is congruent with the voting of quality of life as a top value in Exercise 2 during all meetings.) In the area of "personal responsibility," the students responded positively to the idea of having those who smoke or drink pay higher insurance rates. With respect to "government regulation and taxes," there was not strong agreement to the concept of paying more taxes for the government to provide health care for everyone who could not afford it (although students agreed that everyone should receive basic health care, even if they cannot pay for it themselves). The students were split over the reallocation of greater government funds to health care. Finally, the students were supportive of many types of health-care services, especially preventive services, with the least support shown for providing 24-hour care needed to keep patients who are permanently unconscious on life-support machines.

Student Evaluation

The questions from the evaluation form were grouped into three categories on the basis of content and the reliability of each grouping of questions. Three categories were established: Understanding and Learning; Satisfaction with the Process; and the Value of the Meeting (Figure 4). The reliabilities of the evaluation scale were measured using Cronbach's alpha. The reliabilities were 0.83 for the four questions grouped in category 1 (Understanding and Learning); 0.82 for the four questions in category 2 (Satisfaction with the Process); and 0.90 for the three question in category 3 (Value of the Meeting). There were no statistically significant differences between the responses given by P1 students and P4 students (Table 3).

TABLE 3. Students Evaluation of the Town Meeting Process.[a]

CATEGORY	Total Mean (S.D.) (n = 31)	P1 Mean (S.D.) (n = 15)	P4 Mean (S.D.) (n = 16)	p-value
LEARNING AND UNDERSTANDING	1.85 (0.71)	1.93 (0.96)	1.78 (0.39)	0.573
SATISFACTION WITH THE PROCESS	1.98 (0.68)	1.85 (0.48)	2.09 (0.82)	0.319
VALUE OF THE MEETING	1.35 (0.57)	1.27 (0.48)	1.44 (0.65)	0.414

[a]Items measured on a five-point scale with 1 = strongly agree, 3 = undecided, and 5 = strongly disagree

Students tended to view positively the amount of learning which took place during the meeting and the amount of understanding which was gained. The grouped mean response for the category of Understanding and Learning was 1.85 (Table 3). For the most part, students were satisfied with the process and agreed positively with statements regarding their satisfaction with the choices and votes during the meeting. The grouped mean response for the category of Satisfaction with the Process was 1.98 (Table 3). Finally, students were quite positive with respect to the value of the meeting and were strongly willing to recommend that their friends and classmates attend this meeting. The grouped mean response for the category of Value of the Meeting was 1.35 (Table 3).

CONCLUSIONS AND IMPLICATIONS

The growing needs and demands on the health-care system coupled with limited resources have forced us to recognize that difficult decisions need to be made regarding the allocation of scarce health-care resources. Pharmacy practitioners are already faced with a number of decisions that must be made on the clinical level, including such issues as the duty of pharmacists to warn

patients and patient confidentiality. These decisions, however, are made within the scope of the entire health-care system, which is governed by a number of policy-decisions regarding the allocation of resources within the system.

Several authors have urged that decisions regarding the allocation of scarce health-care resources need to be made in congruence with the values of citizens, both as individuals and as members of society. Several state-wide efforts are currently underway or have already been completed that establish a forum where citizens can talk with each other about their health-care values. These forums or town meetings enable citizens to express opinions and beliefs that have been shaped by participating in a serious discussion of health-care issues.

As future pharmacists, the majority of pharmacy students will face ethical issues at the clinical level. However, students need to understand the difficult choices that face the system as a whole, not only because they are future practitioners governed by the system, but because they are consumers of health-care services.

This study sought to use and evaluate a town meeting format as a means to teach students the values inherent in health-care resource allocation. The goal was to allow students to thoughtfully consider and discuss their values concerning policy ethics. The study also sought to evaluate the student acceptability of such a method.

Teaching pharmacy ethics is challenging. The subject material, for the most part, cannot be taught using a lecture style format because it does not actively involve students. A town meeting format was acceptable to both first- and fourth-year students as a teaching tool where learning can take place. Furthermore, students felt that the process used during the meeting was acceptable and they valued their attendance at the meeting.

Because of the current importance of the subject, the values inherent in health-care resource allocation decisions should be strongly considered as a part of courses on pharmacy ethics. Given the apparent acceptability of a town meeting approach, this process may be useful in highlighting and clarifying values for students.

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