Patient Perception of Medical Student Engagement in Community-Based Outreach Activities During Community Health Clerkship: A Q-Methodology Study

Calimag, Angela Pauline P., R.N., M.A.N., M.D.[1]
Calimag, Maria Minerva P., M.D., M.Sc., Ph.D.[2,3,4,5]

ABSTRACT

Introduction The essence of the medical profession is providing service not only to individual patients but to the community at large. The patient-physician interaction is essential in the Community Service learning component of the Doctor of Medicine curriculum of the University of Santo Tomas, Faculty of Medicine and Surgery (UST-FMS) students for more than five decades. As the modern view of the patient veers away from paternalism, however, he assumes the roles of 'member of the health *team,'* an 'evaluator of *care,'* and a potential 'agent of *change.'* Evidence-based guidelines on health promotion in adult patients recommend giving them "voice" and involving them in projects. A blank spot exists regarding attitudes and expectations of adult patients about the role of medical students in community-based projects, as these remain unreported. Anchored on the Community-based Program Theory, this paper explores the central question: How do patients perceive the role of medical students in a community-based setting?

Methodology The Q-methodology is the primary design used in this study. It combines the objectivity of quantitative approach with the essence of human experiences as explored in qualitative studies. The participants (P-sample) were 25 subjects gathered by convenience sampling in a community outreach site of the Department of Preventive, Family, and Community Medicine of the UST-FMS, in a comprehensive Philippine University. They were asked to arrange 25 statements (Q-sample), derived from the initial interview, in the Q-sort table based on their degree of agreement, which was then further explicated in the post-sort interviews. The results were then subjected to by-person factor analysis with varimax rotation using the PQ Method version 2.11.

Results and Discussion Four profiles emerged from the by-person factor analysis, i.e., the respondents value the medical students in their various roles

✉ Professor Maria Minerva P. Calimag
mpcalimag@ust.edu.ph

1 Faculty of Medicine and Surgery, University of Santo Tomas

2 Department of Pharmacology and Clinical Epidemiology, Faculty of Medicine and Surgery

3 Department of Anesthesiology, University of Santo Tomas Hospital

4 Research Center for Social Science and Education, University of Santo Tomas

5 Research Center for the Health Sciences University of Santo Tomas, Espana, Manila, Philippines

in the community as: (1) 'community engager' in a curative role; (2) 'capacity enhancer' in a promotive role; (3) 'community enabler' in a preventive role; and (4) 'community energizer' in a rehabilitative role. The discussion focused on similarities and differences among profiles regarding the three principal themes (attention, appreciation, and action) derived from the statements used as the Q-sample. This paper contributes to primary care research, as it 1) applied a mixed-method approach in the study of patient and physician relationship in the Philippine community setting; 2) knowledge and perceptions of Filipino patients were codified and made explicit through this study; and 3) it adds to the worldview of the culture-laden concept of patient-physician relationship, particularly regarding the Filipino patients' perceptions of the medical student as a primary care physician and the role they play in his/her healthcare.

Keywords: community-based, primary care, roles, medical students, Philippines.

INTRODUCTION

The essence of the medical profession is to provide service not only to individual patients but to the community at large. The patient-physician interaction is essential in community-based learning delivered through the Community-Based Medical Education (CBME) Program component of the medical curriculum of the University of Santo Tomas, Faculty of Medicine and Surgery (UST-FMS) students for more than five decades. The covenant relationship is a valuable concept in the context of healing that emphasizes interdependence between the patient and his physician (1). The modern view of the patient, however, is now veering away from paternalism. Today, the patient is the most important member of the health team, an 'evaluator of care' and a potential 'agent of change' (2). Evidence-based guidelines on health promotion in adult patients recommend giving them "voice" and involving them in projects (3). Interventions may be considered worthless if they are inconsistent with the beliefs, attitudes, and expectations of patients. Attitudes and expectations of adult patients regarding the role of medical students in community-based projects are as yet unreported. Limited data are available concerning the opinions of patients towards their respective services offered in programs integrated as part of the community outreach activities involving medical students in Community Health Clerkship, a 4-week highly individualized rotation.

Anchored on the community-based theory, this study aims to determine the impact of medical student engagement in community-based outreach activities and identify those components that are difficult to examine in a purely quantitative research. This paper explores the central question: How do patients in the community perceive the role of medical students in a community-based setting?

CBME Programs want and need to be able to tell their story in a way that is acceptable and understandable for all its stakeholders. Both subjective and objective data help to tell the story. This paper through the Q-method properly addresses this concern by its qualitative and quantitative nature. By combining the strengths of both qualitative and quantitative research, Q-methodology will be used to allow for the simultaneous study of both the objective and subjective facets. Culturally, this paper will contribute to the research niche regarding the impact of CBME Programs here in the Philippines.

METHODS

Research Design

The Q-methodology (4-6) used in this study is a mixed method design that integrates the best of both qualitative and quantitative methods that allow researchers to explore patterns in individual subjectivities. It seeks to reveal correlation in viewpoints among the participants (7). The Q-method developed by Stephenson (7,8), is an ''inversion of the factor analysis'' that establishes patterns within and across individuals (by-person analysis) rather than across statements (9).

As the study involved an inquiry on the patients' experiences of engagement with medical students in the context of a community-based setting, it is important to explore how the phenomenon is subjectively perceived and viewed while at the same time reducing the amount of a researcher's bias that may influence the study when based on naturalistic inquiry alone (10,11).

Participants and Study Context

The study was conducted at the San Lorenzo Ruiz Compound in Dagat-Dagatan Navotas.

For the purpose of determining the Lebenswelt of patient perception regarding the role of medical students within the context of community work in primary health care, 25 adult subjects currently residing and/or working at the San Lorenzo Ruiz Compound in Dagat-Dagatan Navotas, the Family Medicine community site was purposively chosen to take part in the study, a majority of which are females (92%) because the study was done in the community's schools, most of which have female teachers and employees. The participants' age ranged from 20 to 68. Participants were selected following the subsequent inclusion criteria: (a) 19 years old and above, (b) lived in/worked in the community for three or more years, and (c) understands Tagalog or English.

A letter of request was forwarded to the Department of Preventive, Family, and Community Medicine. The researcher was then granted permission to conduct the study. Participants were initially informed that a researcher will conduct a study regarding the community health programs. Written informed consent was obtained after the researcher oriented the participants regarding the objectives, course, and significance of the study. They were also oriented that their participation is voluntary and that they can withdraw from the study at any time they wish. Participants were assured that confidentiality will be adhered to at all times and the results of the study will only be reported in the aggregate. There were two phases to the study, the first phase comprised a focus group semi-structured interview, while the second phase was the actual Q-sorting and post-sort discussion. The researcher then constructed the concourse of this study by using adaptations from the statements gathered from the focused group discussion, which comprised the naturalistic form of concourse and supplementing it with additional statements from a range of data sources, such as literature reviews of academic papers on CBME, as well as policy documents which comprised the readymade form of concourse.

Research Instruments and Data Collection

Three stages in data collection were undertaken for this Q-methodology study namely: the identification and sorting of statements (Q-sort), data analysis (Q-analysis) and interpretation (12,13). A robotfoto (14) was used to determine the demographic profile of the participants.

A focus group discussion lasting about 1 hour was conducted. Guide questions focused on what the participants recognize about medical student engagement in community health programs presented in the Community-Based Program Theory. From the transcribed interviews, 25 statements were derived which served as the Q-sample (5,8). The statements were then categorized and three themes surfaced from the dendrogram (15) namely: (a) Attention (what people know and pay attention to), (b) Appreciation (beliefs and attitudes that people value), and (c) Action (what people do).

Each statement from the Q-set was printed on 5" x 8" index cards. The participants, otherwise known as the P-set (5,8) were asked to categorize the statements into three piles: agree, disagree, and neutral. Next, they were instructed to place the statements on the Q-sort table (Figure 1), a 9-point Likert Scale. The participants were first asked to divide the 25 questions into two parts: the "agree" and "disagree" statements. The participants were then instructed to place the statement they most agree with on the rightmost column, then alternately to place the statement they most disagree with on the leftmost column in the Q-sort table. This they do alternately until all the boxes are filled up. The neutral pile was ranked in the remaining slots in the middle. There were limited numbers of statements that could be assigned to each score. Finally, the participants were asked to justify and elaborate on the placement of the statements on the Q-sort table.

The post-sort interviews were recorded with the consent of the participants. Remarks were also taken note of by the researcher. These written remarks were considered as the anchors, which are the significant and distinctive words or phrases lifted from the transcribed interviews. By making use of the anchors identified by the researcher, the verbatim account of the participants revolving around the anchor was lifted and deemed representational of their reality. These were then used

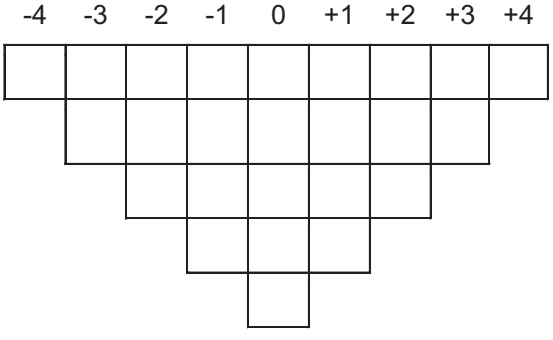

Fig 1. The Q-sort Table.

as the referents in the study, which were specific experiences derived from the post-sort interviews.

Data Analysis

After the Q-sorts had been obtained and completed, they were subjected to the by-person factor analysis (centroid factor extraction) and then were rotated with the Varimax method using the PQMethod software version 2.11 (7,16,17). This was done to limit the number of resultant ways the statements were sorted. A composite sort was computed for each factor representing how a participant with a 100% loading on that factor would have ordered the 32 statements.

The factors were then interpreted and illustrated as profiles using the characterizing statements (those with factor score of -4, -3, +3, and +4 in the composite sort which were determined as the extreme ends of the Q-sort table [statements placed under column no.9 were scored as +4 and those placed under column no.1 were scored as -4]). The cut-off score was determined by the results of the Q-analysis process along with a consultation with the advisor in which the significance of each score lay on what was most agreeable or disagreeable to the subjects. The distinctive statements (those with statistically significant different factor scores as compared to all other factors; $p<0.05$) and the anchors and phenomenal referents were then used to determine the chief characteristics of each factor profile (8). The principal themes were evolved using the inductive approach, wherein frequently reported patterns are reflected and extensively varied raw data synthesized into brief summary formats. This approach can also develop a model/theory about the underlying structure of experiences in the gathered data (18). Further on in the Q-analysis, both cool and warm analysis was done. Cool (the process of culling significant statements and coming up with data categories) and warm analysis (the process of allowing the researchers to identify the essence of a phenomenon) were undertaken. The peculiarity of each of the themes and profiles that were generated lies in the in-depth discussion of the difference among profiles based on the four main profiles generated.

RESULTS

Patient Characteristics

Table 1 shows the patient demographics. Twenty-five subjects agreed to participate in the study.

Table 1. Patient Demographics.

Variable	N=25	Percentage
Sex		
Male	2	8%
Female	23	92%
Age		
20-29	13	52%
30-39	3	12%
40-49	5	20%
50-59	2	8%
60 above	2	8%
Educational attainment		
Elementary	0	0%
High School	0	0%
College	17	68%
Post Graduate	8	32%
Been in the community		
1-3 years	6	24%
4-6 years	4	16%
7-9 years	2	8%
>10 years	13	52%
Department		
Pre-school	2	8%
Elementary	2	8%
High School	6	24%
College	15	60%

Subjects included 2 male (n=2, 8%) and 23 female (n=23, 92%) subjects. The mean age was 35 years with the majority in the age range of 20-29 (n=13, 52%), with an educational attainment of college graduation (n=17, 68%). Majority of the subjects came from the college department (n=15, 60%).

Q-Analysis

Table 2a lists the statements that comprise the Q-sample. The statements used as the Q-sample are clustered around three conceptual frames: (a) attention, (b) appreciation, and (c) action as depicted in Table 2b. Each of the themes comprised a minimum of four statements. Attention statements pertain to the knowledge of the community with regard to the presence of the UST-FMS Community Medicine Junior Interns and the activities they are implementing. Appreciation statements allude to the insight of the community regarding the activities that the UST-FMS Community Medicine Junior Interns' are implementing. The Action statements refer to the level of

Table 2a. List of Statements (Q-Sample).

1	The community is aware of the purpose of the activities done by the medical students.
2	The community is familiar with the roles of the medical students in the community.
3	The medical students only act as observers in our community.
4	The medical students have established good rapport with the members of the community.
5	The medical students provide free health consultations.
6	They give free medications for the patients in the community.
7	They offer free medical missions for the indigents of the community.
8	They offer free feeding program for the underweight preschoolers in the community.
9	The baseline physical exam is the most important of all the programs being conducted by the medical students in the community.
10	The medical students help the limited clinic staff in the schools.
11	They conduct health-related lectures which are beneficial to the community.
12	The medical students conduct trainings (e.g., First-aid) to the teachers and nurses assigned in the school clinics.
13	Their activities address the most pertinent health needs of the community.
14	Their activities address not only health-related activities but also other aspects of a person (e.g., Spiritual, Mental, Emotional)
15	The community benefits from the health programs of the medical students.
16	There is continuity in the health programs they conduct in the community.
17	There is sustainability of the health programs started by the medical students.
18	They follow-up/evaluate the programs they conduct in the community.
19	They give adequate recommendations to the community after they evaluate their health programs.
20	They provide adequate feedback to the community in the "Ulat sa Barangay".
21	The community is encouraged to participate in the health-related activities done by the medical students.
22	The community members are passive receivers of the health programs.
23	The presence has contributed to the improvement of the health awareness of the people in the community.
24	They involve the community in the formulation of health programs.
25	The community leaders have an opinion in the health programs to be initiated in the community.

Table 2b. Major Themes Represented in the Final Q-Set.

	Themes	Statements
I	Attention	1,2,18,21,22,23,24,25
II	Appreciation	4,9,13,14,15,16,17
III	Action	3,5,6.7,8,10,11,12,19,20

involvement of the medical students in programs and activities being implemented in the community.

The scores from the Q-sorting ranged from 1 to 9, from the lowest (-4) to the highest (+4) degree of agreement. Using the PQMethod software version 2.11, four profiles emerged from the by-person factor analysis and Varimax rotation.

Table 3 shows the different factor characteristics delineating the Average Relative Coefficient [ARC], the Composite Reliability [CR], and the Standard Error of the Factor Z scores. Of the 25 participants, seven (7) of them were loaded to Profile A (Ave. Relative Coeff. [ARC] = 0.80; Composite Reliability [CR] = 0.966), six (6) were loaded to Profile B (Ave. Relative Coeff. [ARC] = 0.80; Composite Reliability [CR] = 0.960), five (5) to Profile C (Ave. Relative Coeff. [ARC] = 0.80; Composite Reliability [CR] = 0.952), and four (4) to Profile D (Ave. Relative Coeff. [ARC] = 0.80; Composite Reliability [CR] = 0.941). Only three (3) participants did not meet any factor loading and as such were not classified under any of the four profiles. This is a limitation in the methodology used in the study. Correlation between factors 1 and 4 (r = 0.01) and 3 and 4 (r = 0.16) is low, while there is a moderate correlation between factors 1 and 2 (r = 0.20) and 2 and 4 (r = 0.21), and 2 and 3 (r = 0.29). On the other hand, a strong correlation between factors 1 and 3 (r = 0.41) is seen. The factor matrix indicating the defining sort for the different statements were classified according to profiles. For the description of each profile, the statements from the Q-sample as depicted in Tables 4-7 (figure in brackets), highlighting on the characteristic statements and the transcripts from the initial and post-sort interviews (enclosed in quotation marks) were used. As a group, there were no consensus statements.

DISCUSSION

Poverty, lack of or unstable employment, housing instability, stress, addiction, inadequate education and illiteracy, poor healthcare, and social isolation

Table 3. Defining Variables of the Various Factors Loaded.

Defining Variables	Factors (Profiles)			
	1 Profile A	2 Profile B	3 Profile C	4 Profile D
No. of participants/ factor	7	6	5	4
Average Rel. Coef.	0.800	0.800	0.800	0.800
Composite Reliability	0.966	0.960	0.952	0.941
S.E. of Factor Z-Scores	0.186	0.200	0.218	0.243

Table 4. Distinguishing Statements for Factor 1 (Profile A).

No.	Statement	Q-SV Z-SCR	Q-SV Z-SCR	Q-SV Z-SCR	Q-SV Z-SCR
6	They give free medications for the patients in the community.	3 1.60*	1 0.09	-1 -0.65	1 0.39
23	The presence has contributed to the improvement of health awareness of the people in the community.	1 0.47	0 -0.12	-2 -0.82	4 2.06
2	The community is familiar with the roles of medical students in the community.	1 0.46*	-2 -1.06	3 1.51	-1 -0.33
11	They conduct health-related lectures which are beneficial to the community.	-1 -0.52*	2 0.98	2 0.79	3 1.23
3	The medical students only act as observers in our community.	-1 -0.55*	-4 -1.60	-4 -2.04	-3 -1.41
20	They provide adequate feedback to the community in the "Ulat sa Barangay."	-2 -1.05	1 0.89	0 -0.39	1 0.60
13	Their activities address the most pertinent health needs of the community.	-3 -1.54*	1 0.23	0 0.44	-1 -0.05
19	They give adequate recommendations to the community after they evaluate their health programs.	-4 -1.79*	0 -0.19	0 -0.18	2 0.73

(p<.05; Asterisk (*) indicates significance at p<.01)
Both the Factor Q-Sort Value (Q-SV) and the Z-Score (Z-SCR) are shown.

have always been stated as social determinants of health based on the World Health Organization's Commission on Social Determinants of Health definition that any "social conditions that can affect people's health"(19). During the 1970s, the World Health Organization called upon primary care professionals to work with underserved communities to accomplish three goals: (a) care for the ill, (b) prevent illness, and (c) maximize health potential. To achieve these goals, Stonington and Holmes (20) suggest, however, that such seemingly minor forces such as cross-cultural miscommunication and power differentials in patient-physician (provider-client) interactions also influence health and health disparities. Thus, it is equally important to address not only the already-too-large issues of global and local socioeconomic inequalities but also the less imposing, but still vast, issues of culture and communication.

To promote community service learning, the fourth-year medical students of the UST-FMS undertake a 4-week long posting in the San Lorenzo Ruiz Compound in Dagat-Dagatan Navotas, which complement the classroom learning in the UST-FMS Department of Preventive, Family, and Community

Table 5. Distinguishing Statements for Factor 2 (Profile B).

No.	Statement	Q-SV	Z-SCR	Q-SV	Z-SCR	Q-SV	Z-SCR	Q-SV	Z-SCR
12	The medical students conduct trainings (e.g., First aid) to the teachers and nurses assigned in the school clinics.	1	-0.54	3	1.28*	1	0.45	-2	-1.01
10	The medical students help the limited clinic staff in the schools.	1	0.46	2	1.08	1	0.49	0	0.14
15	The community benefits from the health programs of the medical students.	0	0.11	1	0.89*	0	-0.30	0	-0.01
23	The presence has contributed to the improvement of health awareness of the people in the community.	1	0.47	0	-0.12	-2	-0.82	4	2.06
2	The community is familiar with the roles of medical students in the community.	1	0.46	-2	-1.06	3	1.51	-1	-0.33
1	The community is aware of the purpose of the activities done by the medical students.	2	1.05	-3	-1.14*	4	1.93	2	0.82

(p<.05; Asterisk (*) indicates significance at p<.01)
Both the Factor Q-Sort Value (Q-SV) and the Z-Score (Z-SCR) are shown.

Medicine. Details of the posting, including its objectives, activities, supervision, and method of students' assessment are stated in the manual of the Junior Interns. The general approach of the Community Health Junior Internship Program is to present the major themes of health promotion and disease prevention as important aspects of primary health care in such activities as: core curriculum didactic sessions, small group interactive meetings, topic-specific seminars, and students' participation in one of a variety of individual field experiences where they focus on a single community to help them understand and apply the material presented in the core curriculum. The clerkship culminates in students designing and completing a community/public health-focused project within the context of their field experience. While undergoing the field experience, students work closely with a designated faculty preceptor while rotating through various roles in the community.

Community-based program theory emphasizes the importance of an ecological perspective with multiple interventions delivered at multiple levels and in multiple settings within the community. However, since its inception in the new community at Dagat-Dagatan over three years ago, no assessment has been carried out on the perception of the community with regard to the impact that the presence of the UST-FMS Junior Interns' Program had on their health, and participation and involvement in the community. Furthermore, an extensive review of the literature shows that the assessment of innovations in the education of health professionals such as the community-based program has frequently concentrated on the effects on students and teachers, with less attention paid to the effect of education on practice patterns and very minimal attention to the effect on health in the community.

The respondents' observations and assessments reveal how they respond to the presence of a medical student in their community, and it is this collective perception of the benefits of medical students in community-based projects that will largely determine the success of these projects.

The respondents clustered in Profile A valued the role of provider-client interaction during clinic or OPD visits as the medical students provide health intervention activities. During these encounters, the participants felt cared for by the medical students and the medical students assumed the curative role. One participant mentions during the post sort interview that "the activities should be maintained because it provides health services for other people who are unaware of their health condition" while another expressed that "the free services rendered by UST practitioners greatly helped and aided our limited clinic staff."

Table 6. Distinguishing Statements for Factor 3 (Profile C).

No.	Statement	Q-SV Z-SCR	Q-SV Z-SCR	Q-SV Z-SCR	Q-SV Z-SCR
1	The community is aware of the purpose of the activities done by the medical students.	2 1.05	-3 -1.14	4 1.93*	2 0.82
2	The community is familiar with the roles of the medical students in the community.	1 0.46	-2 -1.06	3 1.51*	-1 -0.33
14	Their activities address not only health-related activities but also other aspects of a person (e.g., Spiritual, Mental, Emotional)	0 -0.25	-1 -0.25	1 0.58*	-1 -0.59
12	The medical students conduct trainings (e.g., First-aid) to the teachers and nurses assigned in the school clinics.	-1 -0.54	3 1.28	1 0.45*	-2 -1.01
20	They provide adequate feedback to the community in the "Ulat sa Barangay".	-2 -1.05	1 0.89	0 -0.39	1 0.60
6	They give free medications for patients in the community.	3 1.60	1 0.09	-1 -0.65	1 0.39
23	The presence has contributed to the improvement of health awareness of the people in the community.	1 0.47	0 -0.12	-2 -0.82	4 2.06

(p<.05; Asterisk (*) indicates significance at p<.01)
Both the Factor Q-Sort Value (Q-SV) and the Z-Score (Z-SCR) are shown.

Table 7. Distinguishing Statements for Factor 4 (Profile D).

No.	Statement	Q-SV Z-SCR	Q-SV Z-SCR	Q-SV Z-SCR	Q-SV Z-SCR
23	The presence has contributed to the improvement of health awareness of the people in the community.	1 0.47	0 -0.12	-2 -0.82	4 2.06*
16	There is continuity in the health programs they conduct in the community.	-2 -0.90	-1 -0.81	-3 -1.15	3 1.43*
19	They give adequate recommendations to the community after they evaluate their health programs.	-4 -1.79	0 -0.19	0 -0.18	2 0.73*
18	They follow-up/evaluate the programs they conduct in the community.	-3 -1.44	-1 -0.86	-2 -0.91	0 0.02*
2	The community is familiar with the roles of medical students in the community.	1 0.46	-2 -1.06	3 1.51	-1 -0.33
22	The community members are passive receivers of health programs.	0 -0.02	0 -0.25	-1 -0.50	-3 -1.53*

(p<.05; Asterisk (*) indicates significance at p<.01)
Both the Factor Q-Sort Value (Q-SV) and the Z-Score (Z-SCR) are shown.

Table 8. The Role Continuum Portrayed by the Medical Student in the Community as Perceived by the Study Participants.

Driver	Focus	Persona	Value	Community Strategic Role Typologies
People	Health intervention activities	Community Engager	Caring (Learn about healthcare disparities)	Curative Role
Purpose	Health education training	Community Enabler	Advocacy (Lifelong active citizenship)	Promotive Role
Process	Health prevention strategies	Community Enhancer	Motivation (Create solutions to complex social problems)	Preventive Role
Performance	Health development plans	Community Energizer	Teamwork (Develop social responsibility in the community)	Rehabilitative Role

The respondents grouped under Profile B focused their attention on the role of the medical students in advocating for and giving health education training to the community as the medical students assume the promotive role. All the subjects agreed and expressed their gratefulness for all the activities being done by the medical students, "We would like to thank their full support and assistance to our college."

Profile C respondents highly regarded the role of medical students in creating solutions to their complex social problems in emphasizing prevention rather than a cure for most diseases.

On the other hand, Profile D respondents gave priority to what they perceived as the role of a medical student in developing health plans for the community, thus rehabilitating the community. Here, the respondents felt that the medical students awakened social responsiveness in the community.

With this study, it was found out that the respondents valued the presence of medical students in the community through their various roles i.e., a) the "community engager" in a curative role as involving the community in health intervention activities with immediate short-term results; b) the "community enabler" in a promotive role through medical training and other capacity-building activities with long-term impact; c) the "community enhancer" in a preventive role as wherein they undertake holistic person health preventive activities that benefit the spiritual, mental, and emotional aspects of the community members; and d) the "community energizer" in a rehabilitative role undertaking community development activities meant to reform and improve the community. Figure 8 shows the role continuum of medical students in the community as perceived and appreciated by members of the community.

However, many of them also expressed their concerns about the sustainability and continuity of programs being implemented by the medical students, "the activity should have a follow up…" and "(However) we hope next time they could extend more time in our community so we could get to know and be more familiar with them and their various roles."

Hence, the medical students taking a role within community organizations as a clinician, educator, mentor, and collaborator can fully realize their social responsibility as physicians through maximal provider-client engagement. Through these community engagements, they experience first-hand about health disparities in context through immersion, gain exposure to a diverse range of patient populations in the community, and improve and polish crucial clinical, communication, organization, and teamwork skills that they can use in the future.

Finally, this paper contributes to primary care research, as it a) applied a mixed-method approach in the study of patient and physician relationship in the Philippine community setting; b) knowledge and perceptions of Filipino patients regarding the role of medical students in community service learning were codified and made explicit through this study; and c) it adds to the worldview of the culture-laden concept of patient-physician (provider-client) relationship, particularly regarding the Filipino patients' perceptions of the medical student as a primary care physician and the role they play in his/her healthcare.

CONCLUSION

A 4-week curriculum is definitely not sufficient to teach all there is to know about health care for the poor and underserved, nor to "solve" the health-related

problems suffered by a single community. Similarly, a curriculum focused on understanding the forces affecting socially and economically marginalized individuals will necessarily provide medical students only a very limited picture among a very limited population about the role of social forces in determining health.

This study is an initial effort to put the curriculum in context to see if indeed the medical students' presence in the community produced a dent in their patients'/clients' cum respondents' understanding of the role of medical students vis-à-vis promoting the goals of primary health care in the community. This study serves as a "mirror" telling our medical students how they fared in their 4-week journey in the Dagat-Dagatan Community. Our hope is that by taking this initial step, we will stir medical students to continue to investigate, and perhaps even address the causes and consequences of health and disease among the socially and economically marginalized sectors of our society.

REFERENCES

1. Rodning CB, Aunay D. Patient-physician interaction: Healing power of a covenant relationship. *The Harbinger*. 1998. Available from: http://www.theharbinger.org/articles/word/rodning1.html [cited 2017 Jun 15].
2. Coulter A. The Autonomous Patient. Ending Paternalism in Medical Care. London: In Book: The Autonomous Patient. *Stationery Office* (for the Nuffield Trust), ISBN: 0117030562. Available from: https://www.researchgate.net/publication [cited 2017 Jun 15].
3. Lis K, et al. Evidence-based guidelines on health promotion for older people. *Vienna, Austria: Austrian Red Cross*, 2008.
4. Brown R. A primer on Q-methodology. *Operant Subjectivity*. 1993;16,91-138.
5. Raje F. Using Q-methodology to develop more perceptive insights in transport and social inclusion. *Transport Policy*. 2007;14,467-477.
6. Webler T, Danielson S, Tuler S. Using Q-method to reveal social perspectives in environmental research. Greenfield, MA: *Social and Environmental Research Institute*, 2009. Available from: www.serius.org/pubs/Qprimer.pdf [cited 2017 Jun 15].
7. Jedeloo S, van Staa A, Latour J, van Exel N. Preferences for health care and self-management among Dutch adolescents with chronic conditions: A Q-methodological investigation. *International Journal of Nursing Studies*. 2010;47(5), 593-603.
8. Militello M, Benham MKP. ''Sorting out'' collective leadership: How Q-methodology can be used to evaluate leadership development. *The Leadership Quarterly*. 2010;21:620-632.
9. Barry J, Proops J. Seeking sustainability discourses with Q-methodology. *Ecological Economics*. 1999;28:337-345.
10. McKeown, B. Q-methodology, communication, and the behavioral text. *Electronic Journal of Communication/La Revue Electronique de Communication*. 1990;1(1):415-436.
11. Chinnis AS, Summers DE, Doerr C, Paulson DJ, Davis SM. Q-methodology—A new way of assessing employee satisfaction. *Journal of Nursing Administration*. 2001;31(5):252-259.
12. McKeown B, Thomas D. Q-methodology. *Newbury Medicine*. 1998;5:1032-1040.
13. Valenta A, Wigger U. Q-methodology: definition and application in health care informatics. *Journal of the American Medical Informatics Association*. 1997;4(6):501-510.
14. Kelchtermans G, Ballet K. The micropolitics of teacher induction: A narrative biographical study on teacher socialization. *Teaching and Teacher Education*. 2002;18(6):105-120.
15. Thelwell RC, Lane AM, Weston J. (Eds.). Mood states, self-set goals, self-efficacy, and performance in academic examinations. *Personality and Individual Differences*. 2007;42(3):573-583.
16. Schmolck P, Atkinson J. PQ method (Version 2.11) [Computer software and manual]. Available from: http://www.lrz-muenchen.de/*schmolck/qmethod/ [cited 2017 Jun 15].
17. Van Exel NJA, de Graaf G, Rietveld P. Getting from A to B: Operant approaches to travel decision making. *Journal of International Society for the Scientific Study of Subjectivity*. 2004;27(4):194-216.
18. Thomas DR. A general inductive approach for qualitative data analysis. Paper made for the School of Population Health, University of Auckland, New Zealand. 2003. Available from: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.462.5445&rep=rep1&type=pdf [cited 2017 Jun 15].
19. Whitehead M, Dahlgren G. Levelling up (Part 1): A discussion paper on concepts and principles for tackling social inequities in health. Copenhagen, Denmark: World Health Organization; 2006. Available from: http://www.euro.who.int/__data/assets/pdf_file/0010/74737/E89383.pdf [cited 2017 Jun 15].
20. Stonington S, Holmes SM. The PLoS Medicine Editors. Social medicine in the twenty-first century. P*LoS Med* 2006;3(10):e445. Available from: https://doi.org/10.1371/journal.pmed.0030445. [cited 2017 Jun 15].