



## Do geriatric home visits enhance learning of post graduate trainees? – A qualitative study from Pakistan.

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### ABSTRACT

**Introduction:** The Family Medicine Residency Program at the Aga Khan University, Karachi introduced a course on elderly care in 2009. To enhance experiential learning, a pilot home visit program was added for the final year residents. Home visits were incorporated for the first time as part of post-graduate training program in Pakistan. Such visits are unique as they allow physicians to assess and experience the health problems of the aged in their own environment. **Objective:** The objective of this study was to identify residents' in-depth perspectives, their positive and negative learning experiences, and to assess if nursing home visits were fulfilling the objectives of geriatric training. **Method:** Two batches of final year residents (n=9) consented to participate. Focused observations, a focused group discussion (FGD), and phone interviews were conducted. A trained facilitator used broad questions made by the research team to explore participant perceptions. Responses were video-taped, transcribed, and shared with participants for member checking. Phone interviews conducted were also recorded, transcribed, and collated with data from the FGD. Members of the research team then coded the data and generated themes independently which were then compared, merged, and analyzed. Quotations by participants were documented. **Result:** The home visit experience was regarded as overwhelming positive and innovative. Uniqueness of nursing home visits in skill building was reported by most participants. Complexity of assessing and managing geriatric patients was acknowledged. Trainees expressed frustration with point of care testing and treatment adherence which hindered their learning in terms of patient outcomes. They also reported these visits as opportunities for self-reflection and introspection. One participant reported the possibility of choosing geriatrics as a career choice. **Conclusion:** The nursing home program strengthened geriatric knowledge and skills of trainees, fulfilling their learning objectives and provided a unique experiential opportunity to care for the elderly. Such programs may be replicated in regional universities to enhance geriatric skills in trainees.

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## Introduction

As the 21st century advances, Pakistan joins other developing countries that are undergoing a rapid population transition due to increasing life spans. According to a United Nations report on world ageing, around 20% of the population was more than 60 years of age in developed countries whereas in Pakistan 6% of people were 60 years or older (1). Though current numbers are small compared to developed countries, Asia is set to see a tripling in the current number of elderly (2).

In Pakistan most elderly live in extended families. Traditionally elderly are not housed in nursing homes or assisted living facilities, however with the rising trend of nuclear families and increasing migration of the working force, the aged are increasingly living on their own and out of this growing necessity some such facilities now exist.

Elderly home bound patients or those in nursing homes or in assisted living facilities form a unique subset of patients as they are generally more vulnerable than those living independently (3). They are often more frail with poor functionality rendering their care more complex. The health systems in the west have supported nursing home and assisted living to facilitate care of the elderly. Visits to these facilities provide a unique opportunity to health care providers to assess patients in their own environment and to reach out to those who may find health care otherwise inaccessible. Both the Accreditation Council of Graduate Medical Education (4) and British Geriatric Society include home visits and nursing home visits as part of training of post graduate candidates.

Ageing being a relatively new phenomena is yet to be established as a separate field of medicine in Pakistan and thus is not part of undergraduate or post graduate training programs in any medical specialty. In 2008 as the need for geriatric training was recognized, a course on elderly care was conceptualized and then implemented in 2009 as part of the Family Medicine Residency Program at the Aga Khan University, Pakistan.

This Family Medicine Residency Program that has been in existence since 1993 is the first post graduate training program for Family Medicine in Pakistan.

The geriatric course incorporated both clinical and didactic components addressing key concepts in the care of the elderly along with common geriatric syndromes. One of the major components of the clinical arm of this course was a pilot home visit program which was designed for the final (fourth) year residents to allow consolidation of clinical skills and practical application of geriatric knowledge. The home/nursing home visits comprised of supervised visits of these residents, who spent half a day (once a month) with elderly patients that were home bound or in nursing homes. The residents performed detailed geriatric evaluations on new patients and provided follow-up visits to their established patients.

The homes/nursing home were identified and selected in collaboration with a local religious community that had an existing set up for their elderly.

Upon completion of the first two years of the pilot, the program was evaluated to ascertain its impact on residents' learning and their positive and negative learning experiences. Another purpose of the study was to assess if nursing home visits were fulfilling and/or strengthening the objectives of geriatric training in order to justify the need for a permanent nursing home visit program.

## Methodology

A qualitative approach was selected for the evaluation and a case study (the geriatric nursing home visit program) of final year residents involved in care of elderly patients in home/nursing home was undertaken in late 2012. Two cohorts of final year residents (7 women and 2 men) who had completed one year of geriatric training either at home or a nursing home were asked to participate in this study.

Three modalities were utilized to understand the effects of the geriatric nursing home visit program. The first method was focused observations by the faculty supervising the residents (study participants) at two different locations i.e. home and a nursing home during the first and second year respectively. This faculty was part of the research team and specifically observed verbal and non-verbal interactions between the residents, patients and caregivers and also amongst the residents. Residents in the Family Medicine program are routinely observed by faculty members during their clinical interactions; hence these final year residents were comfortable with such observations, mitigating any effects on their interactions in these settings.

The second method utilized was a Focus Group Discussion (FGD) (5) conducted to gauge the home /nursing home experiences of these residents. This was conducted by faculty not directly involved in the geriatric training program in order to eliminate any influence on residents' responses. The interviewer received prior training to allow for open ended, free discussions. Literature on focus group discussions (6, 7), along with hands on training on group interviewing were utilized to prepare the interviewer for the FGD. All participants (6 women and 1 man) were also given a brief introduction regarding the process of FGD prior to start of data collection.

A two hour time was allocated for conducting the FGD. Broad based questions designed by the research team were used to obtain participants views and generate discussions related to care of the elderly in a nursing home setting. This discussion was video recorded to allow for accurate transcribing and review of the process by the research team. Another team member was also present to take notes and identify non-verbal cues and body language during the FGD.

After the FGD was conducted, data was transcribed by one member of the research team. Authenticity of the data was determined by member checking of transcribed information. All

errors in transcription and recording were corrected prior to coding.

Lastly phone interviews were conducted with two residents who had taken up positions outside the city and were unable to be physically present for the FGD. These interviews were based on the broad questions used in the FGD.

### **Ethical Considerations**

Ethical consent was obtained from the institutional review board prior to starting this study. Permission was also obtained from the residency director and coordinator. Informed consent was obtained from all participants prior to the start of the FGD (including consent for the video recording). Informed consent was also obtained from participants involved in the phone interviews. All consenting participants were assigned a number and their responses were recorded according to the assigned number. No identifying information of the interviewees was used during observation, transcribing, coding or reporting of study findings.

### **Analysis**

Focused observations of the faculty were transcribed. Data obtained from the FGD and the phone interviews was collated. Video of the FGD was viewed and responses noted were compared to transcripts which were read and re-read after which all meaningful data was coded independently by two investigators. Coding was done for effects on residents' knowledge, skills and attitudes and also effects that were of a more personal nature. The codes were then grouped together to generate themes. (See table 1)

Themes generated through this process were sub classified under positive and negative experiences. Triangulation of data collected was done by comparing with the documented faculty observations to enhance credibility of the findings.

## Results

Observations in the first year revealed a group of residents who were apprehensive yet enthused at the idea of visiting patients in their home environment. They accompanied community volunteers readily and were usually welcomed by the people in the community. Initially a little reserved they were soon interacting comfortably with their patients taking extra time with the more socially vulnerable patients and taking additional care with skeptical care-givers in explaining the diagnoses and management. They also made thorough assessments of the home environment suggesting with sensitivity changes to reduce obvious hazards. On the way back they often discussed and shared their patients with each other and faculty expressing mixed emotions of being able to help and learn but also trepidation about those with advanced diseases or poor social support. One particular instance was noted when two residents expressed their sense of gratification when they were greatly appreciated by a family for curing a chronic rash of their bed-ridden father. On another occasion, a couple of residents who patients' had passed away took time out to go condole with their families.

Observations in the second year started with a new batch of residents visiting a nursing home. The nursing home was well organized, and patients well cared for. The staff shared patient data readily. This cohort mainly dealt with more medically complex patients and nursing staff, unlike the previous batch where there was interaction with patients and their families. Thus initial uncertainty was noted but expressed by the participants to be more because of the uniqueness of the nursing home rather than the hesitation of visiting a patient's home. They assessed new patients prior to studying patient charts and made their initial evaluations independently to complete their own process of learning. Charts were then reviewed to gather data like investigations, medications and to confirm their assessment of patients.

Two particular patient encounters were of note during participant observations. The first was when one trainee discovered that her patient was

a physician placed in the nursing home after a diagnosis of dementia. The second instance of note was when a family member of a patient failed to respond to her medical needs in time. Both these instances were observed to have produced significant sentiments in the participants involved, later leading to discussions among the trainees as to how emotive such encounters were and what each meant to them at a personal level.

Other personal sentiments these encounters generated were also clearly evident through the empathy these visits evoked (noted via patient – doctor dialogue, body language) along with the sense of ownership of their patients as demonstrated by most participants.

During the FGD, engagement and willing contribution of all participants was noted in the process of discussion. The moderator was able to stimulate member dialogue and explore statements that required further elaboration.

There was good inter-coder agreement seen during coding. Similarity was also seen in themes generated which were later matched and merged.

The first major theme was the overall experience. All the respondents reported these visits as a largely positive experience. The concept of providing “care at the doorstep” and in a nursing home was considered unique and innovative by all in the FGD and interviews. Geriatrics was acknowledged as a unique specialty and these visits helped recognize its importance. These visits were reported to be well-placed and timed within the residency curriculum (i.e. fourth year). The first cohort that performed geriatric assessments in assisted living found patient evaluations in the home environment challenging but felt it was a positive step towards community outreach and a way to attend to the medical needs of a “neglected cohort”.

The need for additional time, and complexity of performing geriatric assessments were acknowledged by all participants. The

community setting allowed greater opportunity for in depth assessments compared to the busy traditional clinical practice. The supervision by faculty during these visits was considered helpful in managing some of the more complex patients. Most of the weaknesses about the home/nursing program were related to the lack of a well-defined patient-doctor relationship the participants had with some patients they saw. Some participants reported poor adherence to instructions/treatment advice given to patient or the family members. Resistance to medical advice despite repeated reinforcement, at times caused frustration among the trainees. As one participant stated *“It is difficult to open yourself towards the strangers even if they are doctors with stethoscopes”*.

On further discussion the residents believed that factors responsible for this were at times financial constraints, in other instances social support issues in the care of the elderly, and in some cases, trust building of the caregivers of the elderly who at times were skeptical of following advice given by doctors still under training.

Another area needing improvement was limited faculty available for these home/nursing home visits.

The participants also expressed concern about this program being conducted only in one particular ethnic community hence discussed at length whether their experiences could be generalized and include other local communities as well.

**Knowledge and skills:** All participants reported a positive effect of these visits on their knowledge and understanding of geriatric medicine. The didactic component (tutorials) of the geriatric training was considered beneficial. The participants acknowledged that a greater understanding of differences in history taking and assessment of elderly patients was achieved by these visits. One of the respondents reported that these visits also helped her teach others.

Another described how these visits helped her *“learn to detect things beyond diabetes and hypertension”*.

Overall response for skill building was affirmative. Most reported an increased ability to manage elderly patients after going through the home/nursing visit program. One participant reported that *“I feel I have an edge over my peers by seeing patients from this aspect”*.

One participant who is now working in Wales stated *“These visits changed my views of addressing problems of the elderly in my clinics at that time. Now here in Wales I see more elderly patients..... I can still apply the learning points from those nursing home visits and my patients are very pleased with the care they receive..... ”*.

Two of the respondents reported that they were able to apply this knowledge in managing their elderly relatives. *“My grandmother has dementia and now I can understand her better”*. Another participant stated *“I made a change in how I handle my grandmother’s medicines”*.

**Attitude:** Most of the participants reported a positive effect of these visits on their overall approach to medical care. They described an increased comfort level in handling aged patients and an improved confidence/competence level in themselves as physicians. One resident reported that these visits helped shift her focus from disease oriented care to patient centered care and increased the horizon of clinical care (world outside of the hospital). More than half of the participants reported an increased ability to reflect on their role as providers for such patients. They also reported relating to and empathizing with these patients more so than in their clinical practice, one participant stated *“It made me realize what might happen to me in my old age”*.

Two participants reported feeling low and sad after visiting patients that they saw in the nursing home. One reported her patient dying in the nursing home which *“caused a lot of depression”*.

**Suggestions:** Several suggestions were put forth by both the FGD participants and interviewees. Two participants suggested increasing the number of visits to fortnightly to ensure consolidation of learning. Two other respondents proposed adding formal research in geriatrics during their training. Liaison with home physiotherapy and training of volunteers working in these two sites to enhance care of such patients was suggested by one resident.

Suggestions on improving the didactic component of geriatric training included involving other faculty members and geriatric specialists, introduction of a fellowship program in geriatrics. Use of role play, regular geriatric case presentations by trainees was also suggested.

Other recommendations included introducing geriatric training to other hospitals and training general practitioners in the basics of geriatric care.

## Discussion

A detailed assessment of the home/nursing home visit program was made possible through focused observations, an FGD and interviews regarding experiences and perceptions of our post-graduate trainees during home/nursing home visits. The first objective of this study was achieved with co-relating the focused observations to the FGD and interviews. Participants were able to debate at length and share with each other and (in the FGD) the moderator their views about such visits and effects of encounters with elderly patients in a home or a nursing home setting.

The transcripts were supported by the video-taped FGD which allowed the research team to observe the body language and non-verbal cues of the participants. At the start, all participants who were new to such discussions appeared slightly anxious but soon got involved in the discussion, readily contributing to the dialogue. Most enthusiasm was noted during talk about introducing and continuing these visits and suggestions for improvement.

The key message that came through was the acknowledgement of innovativeness of this program in terms of bringing medical care to the doorstep of the aged. Though long established in the western hemisphere (as a way to strengthen geriatric service and training), this was viewed as a new model of health care in Pakistan. Most residents expressed their satisfaction at the introduction of these visits. Their cognitive and emotional involvement in this new program was evident via their animated responses, body language and eager suggestions all offering testimony to their recommendation that this pilot should be made a permanent part of the curriculum.

The other important aspect that was brought forth in this study was that the home/nursing home visits established the importance of geriatrics as a unique specialty which would not have happened without this experiential process. With the growth in elderly population in the developing world, the acceptance and understanding of geriatrics as a distinct specialty by health care providers becomes imperative. A taskforce of the American Geriatric Society (8) and Japanese Geriatric Society (9) both highlight the need of resource building in geriatrics.

The positive effect on knowledge was confirmed by all respondents. The enhancement of understanding geriatrics was however not restricted to didactic knowledge but allowed practical learning via close observation of elderly patients in their home/nursing home environment, *“In one of the visits we saw a patient who was blind and her son had fixed a rope from her bed to the bathroom to allow her to walk there on her own, which made me realize how people manage by creative thinking”*, stated one participant. This out of the box thinking was readily appreciated by other participants as well and brought out a discussion about other similar encounters where the resourcefulness of caregivers and the resilience of elderly patients were noted which may not have been possible to appreciate in regular clinical encounters.

In addition these visits also brought out certain aspects of Bandura’s social cognitive learning

theory (10) which identifies learning from each other through observation in a common environment. These visits thus highlighted communal learning that was triggered by a common home/nursing environment and where the shared experiences allowed the participants to learn from one another. Bandura's social learning theory was also cited by another qualitative research study which looked at medical students doing geriatric home visits (11).

Skill building in elderly care via these visits was validated not only as an increase in the capacity to manage patients with complex problems or the "heart sink patients" as quoted by one resident but extended beyond geriatrics, enhancing their confidence as physicians. This new found self-assurance extended to managing non-elderly patients as well as reported by the participants. The hands-on experience of home/nursing visits have been cited as a skill building tool in other studies (12).

The observations by the faculty supervising the home/nursing home visits noted the immediate effects some encounters had on residents' emotions and responses. In the FGD and interviews the participants very openly discussed and shared the personal aspects of these visits. Even though the empathy for the elderly patients evoked by this experience was reported more by the female participants, these visits allowed an opportunity for all the residents to relate to their elderly patients and stirred a sense of patient advocacy normally not seen in routine clinic visits. Home visits to the elderly have been found to improve attitude towards aged patients and promote professionalism (13).

Moreover these encounters with elderly patients also brought the residents a step closer to a reflective practice in their professions where they were able to think back, recollect and analyze individual experiences and explain how such influences shaped their cognitive and psychological processes.

The participants very pragmatically sifted through various suggestions for improvements in the current home/nursing home visit program

and concluded that current content and placement of the geriatric course was appropriate and their most important concerns were to train a greater number of physicians outside the institution to care for the elderly and work on long term sustainability of the existing program by increasing the number of faculty currently involved in teaching geriatrics at the institution.

## Conclusion

The nursing home program was positively received by all study participants and strengthened geriatric knowledge and skills of trainees, and provided them all with a unique experiential opportunity to care for the elderly and encouraged growth of reflective practice in these residents.

Geriatric knowledge and skills need to be disseminated to primary care physicians in the community and other academic institutions to better manage this vulnerable cohort of our population.

## References

1. World Population Ageing: 1950-2050. Available at: <http://www.un.org/esa/population/publications/worldageing19502050/>. Accessed July 12, 2013.
2. Harper S. Addressing the implications of Global Ageing. *Journal of Population Research* 2006; 23: No 2
3. Position Statement on Specialist Medical input to Residential and Nursing Home Residents. BGS
4. ACGME Program Requirements for Graduate Medical Education in Family Medicine. 2007. [http://www.acgme.org/acWebsite/downloads/RRC\\_progReq/120pr07012007.pdf](http://www.acgme.org/acWebsite/downloads/RRC_progReq/120pr07012007.pdf)
5. Wong LP. Focus group discussion: a tool for health and medical research. *Singapore Med J*. 2008; 49(3):256-60
6. Guidelines for conducting a focus group. [http://assessment.aas.duke.edu/documents/How\\_to\\_Conduct\\_a\\_Focus\\_Group.pdf](http://assessment.aas.duke.edu/documents/How_to_Conduct_a_Focus_Group.pdf)
7. Blank G. Conducting a focus group. <http://www.cse.lehigh.edu/~glennb/mm/FocusGroups.html>

8. Besdine R, Boult C, Brangman S, Coleman EA, Fried LP, Gerety M et al. American Geriatrics Society Task Force on the Future of Geriatric Medicine. Caring for older Americans: the future of geriatric medicine. *J Am Geriatr Soc.* 2005; 53(6 Suppl).
9. Arai H, Ouchi Y, Yokode M, Ito H, Uematsu H, Eto F et al. Members of Subcommittee for Aging. Toward the realization of a better aged society: messages from gerontology and geriatrics. *Geriatr Gerontol Int.* 2012 Jan;12(1):16-22.
10. Bandura, A. (1989). Human Agency in Social Cognitive Theory. *American Psychologist*, 44, 1175–1184
11. Abbey L, Willett R, Selby-Penczak R, McKnight R. Social learning: medical student perceptions of geriatric house calls. *Gerontol Geriatr Educ.* 2010; 31(2):149-62.
12. Hayashi J, Christmas C, Durso SC. Educational outcomes from a novel house call curriculum for internal medicine residents: report of a 3-year experience. *J Am Geriatr Soc.* 2011; 59 (7):1340-9.
13. Denton GD, Rodriguez R, Paul A, Hemmer PA, Harder J, Short P, Janice LH. A Prospective Controlled Trial of the Influence of a Geriatrics Home Visit Program on Medical Student Knowledge, Skills, and Attitudes towards Care of the Elderly. *J Gen Intern Med.* 2009; 24(5): 599–605