Impact of family home visits on medical students’ learning in the field of social pediatrics

Leonor Angélica Galindo Cárdenas; Miglena Kambourova; Liliana Zuliani Arango; María Eugenia Villegas Peña

Medical Education Department, School of Medicine, University of Antioquia. Carrera 51 D 62-29, Bloque 32, Área de la Salud. Medellín, Colombia. 219 60 88. <leoangelicag@gmail.com>

Pediatrics and Child Care Department, School of Medicine, University of Antioquia

ABSTRACT

This article reports the results from a study conducted among medical students at the University of Antioquia. Its aim was to assess the impact of family home visits that favored the processes of comprehensive training through meaningful learning. This was a qualitative-interpretative case study with systematization, using the following instruments: interviews, surveys, focus groups, document analysis and participant observation (2006-2011). The results showed that when medical consultations were complemented with family home visits, students became sensitized, which increased their motivation and activated their willingness to learn meaningfully. Additionally, it was demonstrated that family home visits presented links with an active didactic strategy that when implemented intentionally, had an impact on students’ humanist and social profile as future healthcare professionals. Application of this strategy is important for teaching social pediatrics and internal medicine.

Keywords: Home visits. Meaningful learning. Didactic strategy. Medical education.

Introduction

Health has been dealt with from different perspectives, most frequently from the biological one, revolving around the causes of illness; this has led to an epistemological, theoretical and methodological crisis in this field, maybe due to an incapability to capture the complexity of the phenomena that constitute the Health–Illness–Society triad. The University of Antioquia declares equity, equality and social responsibility as part of its guiding principles, which in the curriculum of the School of Medicine translate in the approach to the health–illness study object in a comprehensive way, embracing both the biological and social side of things. In Social Pediatrics a complex approach is used whereby understanding of reality is derived from observation of natural, social and historical processes. This cultural sense of subjective construction and validation of experiences as referents that influence decisively the quality of life of children and their families allows combining theory and practice, individual and

1Students are being trained as internists and their syllabus includes an area of Childhood where Social Pediatrics contents are taught and the didactic strategy of Family Home Visits is applied, which is developed by the Pediatrics and Child Care Department of the University of Antioquia School of Medicine.
collective aspects, what is qualitative and what is quantitative (Garcia, 2006; Verneaux, 1999).

The curriculum of the University of Antioquia School of Medicine is inspired by pedagogical principles of comprehensive training and inquiry-based learning, where the teaching methodology translates into the application of active strategies based in the solution of mock or real problems, case studies, classroom projects and family home visits, where students have to make hypotheses, check sources, verify them, socialize findings, be active in the construction of their knowledge in the relationship between theory and practice, which all favor the transfer of learning.

This educational approach focuses in student interests and training needs as starting points for pedagogic mediation, so that new information links up meaningfully and, in this way, activates changes in the cognitive structure of the learner. (Ausubel, 1980). As students progress through their curriculum and manage to apply their knowledge to new problems such as family home visits, this increases their capacity to learn how to learn, waking up their spirit of enquiry and critical thinking when comparing theory with reality. It also helps them develop their communication skills, sensitizes them to social commitment, and creates conditions for them to contribute subjectively to the multiple views of reality, which favors intersubjectivity.

Thus, family home visits during medical education make sense as one more setting of meaningful learning and become a teaching strategy aiming at a biopsychosocial approach of Medicine. This experience in Social Pediatrics fulfills the need to consider the microcontext in the assessment of children, since the physical examination and medical interview do not provide enough insight into the social context of patients (here called fostered beings) and their families. Hence the importance of performing visits as a complement to medical interviews, tending to a comprehensive intervention in the health-illness process, and as a training opportunity for students.

The combination of medical consultation with family home visits creates conditions to gain additional information on fostered beings, allowing to offer them a thorough care, to establish a closer relationship between them and the physician, and to stimulate family participation in the intervention.

Thus, family home visits as a teaching strategy make it possible to obtain knowledge of the reality in which the children’s families live, for those attending healthcare services and voluntarily enlisted in the Community and Holistic Health of Children Program, of the Social Pediatrics Section at the Pediatrics and Child Care Department of the University of Antioquia School of Medicine.

The families that enter the program come from different cultures, ethnical backgrounds and strata, without any sort of discrimination. Professors prepare the students before visits having a conversation with them about their imaginary, they analyze together relevant data from medical records, they consider the geographic, social and cultural context of the place, and they define a visit plan.

During the family home visit students are accompanied by an interdisciplinary group including some Pediatrician, some Neuropsychologist, some Psychologist, some Nurse’s Aide, some Special Education professional, and some Social Worker concerned with Family. The healthcare team is permanent for the Community and Holistic Health of Children Program.

During their sixth semester, medical students rotating in Social Pediatrics participate in family home visits as an educational experience. Although students visit a single family each during their semester, this still has a significant impact in their training because the experience preparation and feedback last the whole semester, seeking maximum benefit, without a direct responsibility over the family but rather a joint responsibility as part of the healthcare team.

After analyzing the family context and identifying the strengths and needs of the family in front of the child’s health-illness situation, an intervention plan is devised by each group of students with their professor, to be implemented by the health team by means of follow-up consultation and referrals. It is worth remarking that the intervention with families focuses in the child’s support, without the possibility to attend other family members or situations, but advice maybe given to seek help from other institutions.
This experience leaves some students with mixed feelings of frustration, powerlessness, anger, satisfaction, motivation, interest, which are expressed and socialized in the classroom with the professor’s mediation to reconcile them with reality and encourage their contribution to social transformation as citizens and future physicians.

Our qualitative study answers the question whether family home visits suppose a didactic strategy allowing students to comprehend the health-illness process in a biopsychosocial way, and promoting their comprehensive training. Our main goal was to assess the impact of the family home visit experience.

With the end to validate the relevance of the investigation and to explore previous studies, a literature search was done in various databases such as OVID, OPAC, SCIELO, EBRARY, PUDMED, using various descriptors and descriptor combinations. This search did not find any study showing that family home visits can be an effective strategy to train medical students in the performance of comprehensive diagnosis of children and their families. Some literature on home visits was found but it concerned other issues.

One of the studies regards home visits to pregnant women aiming to prevent neonatal mortality (Kirkwood et al., 2010). Other studies conclude that home visits can be useful in early interventions to promote healthy nutritional habits, to prevent child obesity, or concern the full evaluation of children, mainly of those at risk of abuse or neglect from their carers (Wen et al., 2009; Vásquez, Pitta, 2006). Such visits though, are performed by trained volunteers or health workers without the presence of medical students.

In Colombia, a study carried out in the Faculty of Odontology at the Santiago de Cali University (Pardo, Pardo, 2012) investigates home visits as an educational strategy to identify and prevent illness risk factors in the community. At the University of Antioquia School of Medicine, since 2004, family home visits are part of Social Pediatrics teaching for sixth-semester undergraduate medical students, but in spite of their obvious educational value they were not systematic. The University of San Martin has an approach to home visits as a contribution to patients’ health care, but the impact of this strategy has not yet been assessed.

In summary, although there are studies showing the importance of family home visits in the comprehensive prevention, promotion, care and rehabilitation of patients, no studies were found assessing this strategy’s role in the meaningful learning and comprehensive education of medical students. This study can therefore contribute to the field of medical education by putting forward an active didactic strategy that allows meaningful learning, which results in a humanistic and social profile of students and future professionals in healthcare. Such a didactic strategy is pertinent not only in Social Pediatrics teaching, but also in medical education in general.

Materials and methods

This is a qualitative study because “it revolves around individuality as a creative conquest, structured discursively, historically contextualized and socially produced, reproduced and transmitted” (Galeano, 2004, p.69), where we assess the knowledge built from the singularity, this being an approach to social knowledge discovery.

This is a case study that investigated the undergraduate medical students of Social Pediatrics from 2006 until 2011, at the University of Antioquia. We analyzed students’ perceptions and described reality as experienced by them. Moreover it allowed constructions seeking an holistic outlook (Martínez, 2006; Vera, s.f.).

We used data collection tools such as interviews, surveys, students focus groups, professors focus group, analysis of evaluation reports made by the Social Pediatrics Section of participating students, and participant observation in some of the family home visits. Data collection tools were submitted to experts and to people having some wisdom related with the study object and approach.

Selection of participants was at random among undergraduate medical students performing the family home visit during their sixth semester. To comply with ethical prerequisites we informed them about the goals and scope of the study, and informed consents were duly executed.
according to the Ministry of Health Resolution 008430 of 1993. Information collection and data analysis were done in parallel. We encoded first the information obtained from the students’ evaluation reports. Then we encoded the information from the interviews, surveys and focus groups, and made a triangulation of the information with the corresponding categories. This analysis was performed as the information collection took place, since “the analysis of data is a continuous process in qualitative research, data collection and analysis go hand in hand” (Taylor, Bogdan, 1998, p.153). The case study confirmed the validity by checking out information with the participants, showing the codes, categories and connection networks. During the study we performed procedures such as theoretical sampling, analysis, triangulation and submission to experts. The final result of the data categorization process and subsequent analysis is described in Results and Conclusions.

Results

The analysis of systematized documents, interviews with participants, focus groups and observations led to the following results:

From the analysis of students’ interviews we can interpret that they perceived how the visit allowed them to go beyond institutionalized health. It expanded their biological outlook, made it more global, corroborating an information that can sometimes be confirmed or confronted with reality, sometimes even modifying the diagnosis due to new elements arising such as psychosocial aspects, lifestyles, the very reality of life and families’ daily experience. It gave them a greater objectivity and a different approach, a complementary, clarifying and reevaluating one, allowing them to make better diagnoses and make an intervention oriented to the social reality of families. So said the students:

“recognize the importance that the fieldwork of physicians extends beyond health institutions”. (Student survey)

“In my personal experience there was a lot of variation between the child consultation and the home visit, and besides, it helped us to plan treatment more in accordance with reality”. (Student interview)

“Patients are not just clinical but also their context, with biopsychosocial circumstances. And to know that there are more strategies than just consultation which can help providing a better care to patients”. (Student interview)

Another result concerning the contribution of this tandem (consultation-family home visit) to meaningful learning: both students and professors confirm the importance of purposefully working in the two settings of medical intervention, the consultation which allows a first approach to patients and their context, and the family home visit that widens the diagnosis and goes deeper into the protective factors and risk factors of the child, either medical or social and familial. In words of the students and professors:

“...the consultation gave us a probability of what we were looking for, and with these ideas, we could later confirm our findings and make a diagnosis of the functionality in that environment”. (Students focus group)

“...Identification of protective and risk factors, not manifest or differently presented during consultation. It is a very good tool for diagnosis and towards a better support to patients”. (Students focus group)

“...the prior consultation is necessary to know the family, the visit to go more deeply into all those risk factors of the child, both medical and social”. (Student interview)

“The presence of the professor allows recognizing elements of verbal or body language that escape to the students given their lack of experience. It allows the feedback and confrontation of theory and practice” (Professors focus group)

An aspect relating to the previous understanding, beliefs, prejudices and expectations of students...
becomes an essential element when it comes to confronting them with reality. Professors mentioned the importance of exploring previous understanding and seeing what happened to it in the final perception and what was the impact in terms of meaningful learning. In this respect the professors asserted that:

“The experience of combining the consultation with the home visit allows the students to confront their imaginary with reality; it expands their perception of reality... On the other hand, it becomes clear that consultation findings can be doubtful for the physician. Consultation gives an idea of what to look for, and with these ideas one later confirms things and makes a diagnosis of the functionality in that context”. (Professors focus group)

As for the students, they confirmed

“...that when we go to home visits we either reject or confirm things, but often reality differs from their narrative or else we find things which they maybe forgot to mention”. (Students focus group) “This information allowed me to get a general idea of what was happening with my patient, but it was the information obtained during the home visit that actually allowed me to clarify the diagnosis”. (Student survey)

We also observed and analyzed in the interviews a change in the physician-family-fostered being relationship occurring after the family home visit. Students found that consultation improves communication and the effectiveness of the visit, but when they got there, they noticed a change in the attitude of families, mothers, and fostered beings, regarding the health professional, strengthening the bond with the child, reassuring the family, reinforcing fostering guidelines and improving participation and teamwork with the family.

“During home visits the children felt better surrounded by their familial environment and didn’t feel strange, because they always tend to be more reserved, to cry and become a lot more irritable, while in their familial environment they feel a lot more at ease, much more confident, and one can examine them better”. (Student interview)

“The mum behaved completely differently in consultation and at home, and at home we noticed other things that she was trying, to help the child make progress”. (Student interview)

Regarding the family of patients and more specifically the parents, home visits showed that their behavior and attitude was a lot more spontaneous and open, as reported by students:

“the natural relationship established allows them to be more calm, more confident, and allows to learn other things that do not arise in the hospital environment”. (Student interview)

We may deduce that the home environment makes families feel more open to conversation, feeling it is their place, where they belong, whereas in consultation they perceive the coldness of the place, which creates tension and hinders communication with strangers. Parents do not easily let surface intimate or private things, which can lead to incomplete pictures of reality as a protection mechanism, to avoid any physician criticism of parental behavior that might not be in line with fostering guidelines, maybe affecting the patient’s health.

“The visit creates feelings of trust in a good place to share private information. They felt so much at ease... They felt so confident with us”. (Students focus group)

“The family is fully understanding and makes you part of the nucleus, it is like the biggest satisfaction. One learns to treat people better and to be more sensitive with them. Also to face real social situations.” (Student survey)

Other parents’ imaginary leads them to want to protect their authority, and they do so but without any will to harm their child. This can happen if the health professional is not assertive enough, failing to create an atmosphere more open and relaxed, assuming that the majority of parents always wish the best for their children, and in this case, we need to continue supporting family education with child care advice to promote the holistic health of children. This situation can influence the medical history and the diagnosis performed in the consultation, which can be
looked into more in depth in view of the patient’s context by means of the family home visit. Regarding communication skills it is essential for medical students at the University of Antioquia to add them to their professional profile, and to develop them the School of Medicine curriculum should provide specific training; it is said that the first stage of communication, that of understanding, involves being open to other ways of life; tolerance and reasonable pluralism rest on it; it constitutes the recognition of the right to difference. It is necessary to lose the fear to understand others… (Hoyos, 1995).

The families visited in this study constantly revealed vulnerable socioeconomic situations. Some more than others lacked basic resources to provide a holistic health environment, but in spite of this variable the families showed a wish to support their child even beyond their possibilities. Here the students develop a role additional to their medical function, contributing with their advice to improve life conditions by helping families to obtain governmental help they did not know about, with alimentation, health or housing. The team of professors and students frequently offer this type of guidance, supporting families and simultaneously promoting a holistic understanding of the health-illness process in the comprehensive training of students:

“First of all, it is the only time during their studies that they [the students] have this opportunity to experience this, the home visit experience allows them to go further than a mere medical examination and prescribing some pills to deal with the pain. It allows showing them the possibility of a comprehensive diagnosis. They have to look for the social response that the municipality or the department can provide, and thus expand their vision. They don’t need to know every resource on offer, but already they understand that there are some rights, that there are some options, that institutional bodies have programs being missed by families in spite of being entitled to such help. The student then feels obliged to help the family in that respect…” (Professors focus group)

It is worth saying that all the visited families were open to the visit, pleased by it and full of expectations. This acceptance was expressed with gestures of gratefulness, of generosity and esteem, which influence the establishment of an affective bond between patient, family and medical practitioners. This bond results in greater credibility and acceptance of medical recommendations, and this translates in a better family intervention around the patient, to achieve stability and improvement.

“A bond of closeness gets established, of another dimension, allowing collaboration between all parties”. (Students focus group)

And on the other hand, the physician’s bonds with the fostered being and all family members are improved, since it humanizes the health professional, then seen closer, more available, allowing the physician to take care of the child and to know it in a different setting, and also to know the support networks.

“The best moment of the visit was maybe when we explained to the whole the family (most members not going to consultation) the illness of the patient, its cause and what care had to be provided, and when we saw them all so interested to know what do to improve the girl’s medical and social situation. This showed how important she was for them and how they were all willing to help to get her through”. (Student survey)

A result related with meaningful learning in health professionals’ training regards the relevance of teamwork, which becomes apparent with the family participation in the preparation of an intervention plan to improve the quality of life of the family and the fostered being. After the consultation and home visit, the dialogue and points of all parties were better appreciated, as well as the comprehensive analysis of the situation, and the lessons learnt. Some participants expressed it in this way:

“Between all we had a dialogue and reached an agreement as to what the real situation was. It was like the dialogue of all of us there”. (Students focus group)

“The visit allows students to transcend books and theory”. (Professors focus group)
Regarding trained skills, those general skills for a better intervention of practitioners where life happens as well as in their specific professional setting, the interpretation of results shows the contribution of family home visits as an active didactic strategy that favors the development of values and attitudes such as responsibility, social commitment, ethics, teamwork, learning to learn and communication. The professors that participated assert that the child care outlook allows students to identify family development goals, it wakes up empathic feelings in health professionals towards the families and fostered beings, it improves the patient-physician relationship and gives a new meaning to what they do as human beings and as holistic physicians.

“I learnt the big responsibility that one has as treating physician no just immediately, but for the future”. (Student survey)

“Home visits are an experience that wakes up human sensitivity, that allows us to see beyond what one can see in a consultation room, because it allows us to perceive that our patient is a complex being, surrounded by certain social, economic, familial, psychological, environmental circumstances…”. (Student survey)

“I was impressed by the family’s resources for resilience. I learnt a few things to help other families face difficult situations in family dynamics”. (Professor survey)

Discussion

After the results interpretation we shall now discuss family home visits from the viewpoint of an active didactic strategy that enhances meaningful learning and contributes to the comprehensive training of the student and future health professional.

The concept of meaningful learning in an Ausubelian perspective lies at the heart of this study. It is understood as a learning process where new information becomes meaningful to apprentices by interaction with relevant information previously available in their cognitive structure with some degree of stability, clarity, organization and differentiation (Ausubel, 1980).

For Ander-Egg (1995, p.71) the home visit is “…the visit made by the social worker to a household trying to make a direct contact with the person and/or the person’s family, where they live, with an investigative, therapeutic, supportive or counseling purpose”. On the other hand, the Chilean Ministry of Health concept of home visit is that of “care provided at someone’s or a family’s place with an aim to know their socioeconomic, environmental and cultural reality, to complement the diagnosis, to stimulate the active participation of the family, to perform a social intervention with goals of health promotion, protection, recovery or rehabilitation” (Ministry of Health, 1993, in Cazorla, Fernández, s.f., p.2)

In Social Pediatrics and other medical fields teaching we always need to seek the relationship between theory and practice, as well as the cognitive bridge allowing to bring together the social and cultural world with scientific theory. It is precisely through the “family home visit” didactic strategy that we can turn the classroom into the patients’ consultation room and home, and use these two settings to ensure meaningful learning takes root in a durable and transformative way in the comprehensive training of students as future physicians.

The prior knowledge that Ausubel refers to, gained during consultation, is validated, complemented or modified during the family home visit. This confrontation stimulates students to seek theoretical sources and round tables with other professors from areas in which they analyze how the psychophysiological condition of patients can be improved, thus having additional tools to complete the diagnosis, treatment and rehabilitation of patients. Some family situations are revealed, with economical, social, educational and cultural aspects that surpass the students and professors performing the visits. However, this holistic outlook, inevitable to the extent that they are experiencing the reality of patients and families, sensitizes students stimulating them to go beyond their duty, and a synergy occurs. Thus, collaboratively, viable alternatives are sought to improve the situation and quality of life of patients and their families.
Meaningful learning has humanistic connotations; it underlies the constructive, positive integration of thoughts, feelings and actions conducive to human blossoming. This didactic strategy that adds to consultation helps enlarge the outlook of the training students, so they will identify and go deeper into not just the biological aspects of patients, but also the social and cultural aspects and their impact in lifestyles. Thus, the scope of the health-illness process is widened, which “is one of the most important challenges today in the construction of the new paradigm, since it is only from this perspective that we can reshape the task of health workers in the treatment and rehabilitation of patients as well as in the promotion of health and disease prevention” (Comité de Currículo, 2000, p.29)

The strategy also boosts the megaskill of the 21st century, learning to learn, which involves the ability to reflect on the ways one learns and act accordingly, autoregulating oneself’s learning process by means of appropriate, flexible strategies that can be adapted and applied to new situations (Díaz, Hernández, 1999). This skill is revealed in home visits, in the processes of autoregulation, investigation, and methodic search of sources in the preparation of visits and afterwards, looking for information regarding those new aspects being faced and using such knowledge to do something about them.

Thus, the training students face reality. Thus, they resort to the knowledge they have about the country’s public health policies to help families assert their rights and, on the other hand, they express their powerlessness feelings in front of the adverse situations they discover that hinder the implementation of those policies. Facing this allows them to develop a critical view on health and pushes them to act so as to put things in motion, trying to ensure equity and to contribute to the humanization of the health system. Students stop being passive and acquire a level of sensitiveness towards taking part in the search for strategies to improve life conditions in the community.

Comprehensive training includes professional training but goes further than that. It is an educational approach. The education provided by the university is comprehensive insofar as it guides students as whole persons and not just individuals with some cognitive potential to perform technical or professional tasks. The scope of comprehensive training is that of an educational practice that focuses on the person and aims at its best socialization, so that students can develop their aptitude to autonomously harness their spirit potential, in the framework of the society they live in, and so they can commit themselves to its transformation with historical consciousness. (Orozco Silva, 1999, s.f.)

**Conclusions**

This study allows us to conclude that achieving meaningful learning asks for waking up students’ sensitivity towards the study object, experiencing life situations they can connect with, such as family home visits. The level of sensitivity increases motivation, and with motivation the willingness to learn meaningfully gets triggered. Our findings can be of use as a reference for other research that could be done in this field and could contribute to medical education, but there is a need to go deeper into the impact of home visits in the training of medical students.

We can also conclude that in countries such as Colombia, with violence issues and serious socioeconomic troubles, the implementation of didactic strategies such as family home visits is influenced by variables beyond our control, such as the geographical location of some dwellings with limited road access and public transport, or the existence of unsafe areas and invisible barriers due to violent groups. Such variables influence the interdisciplinary work of health teams which cannot easily get to the fostered being home (Zuliani et al. 2012).

Another kind of difficulty arises with some family members that develop all sorts of expectations relative to the visit. Some believe they will receive all kinds of help from the health workers, and others fear to be judged for their lack of knowledge on how to look after the fostered being. Nevertheless, to the extent that things get socialized and consensuses are reached between the parties, tensions decrease and at the end of the experience perceptions and feelings can change given how enriching the training strategy is for all participants. The health workers team also
advises families on institutions that can support them in other aspects contributive to the area’s salubriousness.

Collaborators
The authors have worked together in all stages of the article’s production.

Acknowledgements
We would like to thank the participant students, families and professors for their enriching contributions to this work.

References


Translated by Artur Sixto.

1 Address: University of Antioquia. Carrera 51 D 62-29, Bloque 32, Área de la Salud. Medellín, Colombia. 219 60 88.