

Health Mentoring Theory among Filipino Pre-Service Pediatrics: A Grounded Approach

Evelyn G. Sta. Cruz, MD, PhD

Manila Central University, College of Medicine, Caloocan City, Philippines

evelyndg27@gmail.com

Abstract: Health mentoring is a creative interplay of various teaching strategies. In Pediatrics, the transfer of knowledge directly to the patient / relatives is barely achieved because of various factors. This study aspired to determine health mentoring mechanisms among pre-service pediatricians. The study was conducted in three training hospitals in Metro Manila, ten (10) senior pre-service pediatrics were purposively selected based on their willingness to participate. Respondents were asked to accomplish a demographic questionnaire and answer interview questions related to their signature pedagogies / health mentoring mechanism. The study showcased the phases of health mentoring distinct in the practice among pediatrics. Three phases similar to an airplane take off was identified, preparation is being done before discussing the illness, accomplished through introduction of one's self to develop rapport, this is Departure phase. Cruise in airplane take off is similar to discussing the illness, its treatment and complications; this can be referred to as Fight or Flight phase. The last phases is the Arrival phase. In health mentoring, relatives are empowered because of the previous discussion. In conclusion, not all patient encounters are the same, several factors are to be considered such as type of illness, age of the child, socioeconomic status, educational attainment of the relatives, and their views and beliefs about the illness. As pediatricians, one must be equipped with abilities to confront each situation. Even when one is knowledgeable but if there are difficulties with communication, health promotion; thus, mentoring will not be effective.

Keywords: Health Mentoring; Grounded theory; Pre-service Pediatricians

1. INTRODUCTION

Recently, there have been vast studies on health promotion through direct-teaching patients and relatives. Estimates of patients' non-adherence to physicians' therapeutic recommendation range from 50% - 92% (McCann, 1990), and this was identified as one of the most important issues among medical practitioners face today. Pre-service Pediatrics were taught to care for patients from birth to their early adulthood, but a big part of this profession was to involve their patients, guardian or relatives in health care through teaching and this defines Signature Pedagogies (Shulman, 2005).

Thinking, performing, and acting with integrity are the three fundamental dimensions of shaping present-day physicians (Shulman, 2005). In medicine education, many years were spent learning on how to arrive at a diagnosis, its treatment as well as prevention.

Interestingly, the attitude and manner on how to engage and educate patients as well as their significant others in the management of care were least explored. Extensive tools are available for health teaching, which may be part of Signature Pedagogies (SP). SPs include discussion, lectures, demonstration, use of written material, audiotapes, computer technology and simulated games, audiotapes, verbal demonstrations and role-playing (Friedman, 2014).

In some studies, questioning may also be part of signature pedagogy (Khademi & Abdollahpour, 2014; Long & Blankenburg, 2015). Higher success in problem solving would bring about high satisfaction with gathered information if questions are well-formed (Cheng, 2004). In a four-year medical study, inclusive of hospital exposure and additional year of internship, one may assume that medical graduates are already equipped with their style of teaching and educating patients that they will carry with them on their hospital pre-service training. However, as residents experienced patient overload and other demands, their teaching techniques may have changed and adaptation to situations may occur.

Mentoring has been shown to be a strategy to improve behavior, encourage success among individuals, and facilitate health related outcomes among people (Dubois & Karcher, 2005). In the medical setting, mentoring was not limited to teaching medical facts but also providing counselling during times of family stress (Kram, 1985). Educated patients/ relatives will be more satisfied with care. They will be healthier and would seek medical services less frequently (Oyetunde & Akinmeyer, 2015).

Mentoring resulted in significant favorable outcome, in terms of behavioral, attitudinal, motivational, and health related issues (Eby, 2008). In the field of Pediatrics, health teaching should be patient and family centered, accessible, continuous, coordinated and culturally effective to produce quality pediatric care (Chen et al, 2012).

2. STATEMENT OF THE PROBLEM

This study attempted to create a theory / concept on health mentoring mechanisms among pre-service Filipino pediatrics using a grounded theory approach.

3. SIGNIFICANCE OF THE STUDY

This study will benefit the patients, their guardians, and physicians in training. For patients and relatives this study will encourage each individual to be involved in the care of their health and get engaged with promotion of primary disease prevention. Physicians in training will learn that there is a lot of strategies that can be utilized in health promotion.

4. SCOPE AND LIMITATIONS OF THE STUDY

This study evaluated pre-service pediatricians in relation to their health mentoring mechanism. A researcher-made aide memoire was used to guide the informal interview conducted at the key informants' available and convenient time. Data gathering using the grounded approach was employed between December 2016 and January 2017.

5. METHODOLOGY

Research Design

This study made use of a grounded theory design of qualitative research to elucidate the patterns of health mentoring experiences among Filipino pre-service pediatricians. According to Glaser and Strauss (1967), Grounded Theory research was designed to uncover an opportunity to create new theories and contexts.

Research Site

The study was conducted in three training hospitals in Metro Manila, tagged as Hospital A, B, and C. All three hospitals were accredited by the Philippine Pediatric Society with Level I training program. Ten (10) senior pre-service pediatricians and graduates of the pediatric training program with minimum of three (3) years exposure were purposively selected based on their willingness to participate. Permission letters were secured from the medical directors of the hospitals prior to data gathering.

Data Gathering Procedure

Respondents were asked to accomplish a demographic questionnaire and answer interview questions related to their signature pedagogies / health mentoring mechanism used in the current practice guided by an aide memoire. An interview lasting for thirty to forty-five (30-45) minutes was done and recorded from individual key

informants. As data were gathered, codes were elicited and continued until saturation was reached and theory emerged.

Code Analysis Procedures

Data from the interview were subjected to cool and warm analyses with Hermeneutic integration to create emerging theory based on the common patterns elicited from specific experiences. Themes, concepts or theories that emerged were validated through peer checking.

6. DISCUSSIONS

Mentoring is a process. It is an enduring relationship between an individual with immense experience and with someone who wants to learn. The primary goal is the transfer of knowledge that will enable the receiver to act or perform accordingly. Focusing on desirable and minimizing undesirable actions can be discussed during mentoring. It can also open opportunities to discuss other aspects not related to health such as relationships and emotional support during the treatment and recovery period. A mentor may provide counseling during times of stress (Eby et al., 2008).

In the health care setting, counseling a relative was viewed in three (3) phases. In any process, activities were fragmented to make the task easier and to facilitate a smooth flow. One may begin with a brief introduction of one's self, followed by discussion of the problem, and ending with questioning to assess understanding.

These phases can be compared to the phases of an airplane taking off .

Phases of Health Mentoring

In health mentoring, the same principle can be applied, similar to an aircraft takeoff, preparation is being done before discussing the illness, and this is accomplished in the medical setting by introduction of one's self to develop rapport, this phase can be metaphorically called as Departure phase. Cruise in airplane take off is similar to discussing the illness, its treatment and complications; this can be referred to as Fight or Flight phase. This might take major half of the encounter and outcome expected is understanding of the illness. The last 2 phases in aircraft take off - descent and landing is the Arrival phase. In health mentoring, relatives are empowered because of the previous discussion. This phase ensures the physician that he/she was able to convey the importance of compliance and preventive measures for full recovery.

Health Mentoring and Quality Pediatric Care

Science is within reach. Technology was able to bridge health illiteracy. Symptoms to its diagnosis, treatment, and prevention were made available to patients

and relatives. It was made easier for anyone to access his or her medical records as information management system improves. However, what made pediatric care different is the process involved in treatment. A big percent of patient/relative encounter is spent with interviewing and more of these are dedicated to developing trust and rapport. Interviewing is not a simple technique learned in medical school. The art and heart of interviewing was developed gradually. It does not only involve the intellect, it involves emotion.

In the study of Maquire and Piceathly (2002), establishing eye contact and maintaining it at reasonable intervals during consultation to show interest are necessary skills to elicit patients' problem. To arrive at a definite diagnosis, patients/relatives are encouraged to be particular about the sequence in which the problems occurred. Asking about their insight and feelings during that time will help them to remember their experiences, feel understood, and cope with their problems.

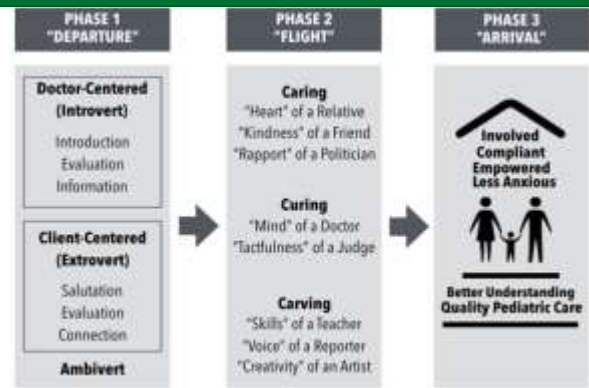
Once a diagnosis is reached, it is again explained thoroughly and compassionately to the patient/relative. The necessary intervention, treatment, modification of lifestyle if necessary and prevention are discussed. Ultimately, these patients /relatives will be endowed with knowledge they can use to conform with the therapeutic intervention and this is Quality Pediatric care.

Mentoring resulted in highly positive effects. As in the study of Eby et al.(2008), it drives affective, cognitive and behavioral outcomes. Sense of belongingness is achieved and an individual who feels he belonged is an empowered individual.

Patient empowerment is a valued outcome in health intervention independent of health status (McAllister et al., 2012). Freedom and power were derived from the word empowerment (Berger, 2002). Broadly defined, it is a process enabling individuals to take control of their lives and environment. In the health care context, it promotes autonomous self-regulation so that the individual's potential for health and wellness is maximised (Lau, DH, 2002). Health mentoring empowers the patient/relative to be part of the healing process. It lessens their anxiety and helps build a trusting environment in every doctor –patient encounter.

Model of Health Mentoring Mechanism among Pre-service Pediatricians

To elucidate the mentoring mechanism among pre – service pediatricians, a model was crafted to further substantiate the results of this grounded theory study



7. SUMMARY AND RECOMMENDATION

The practice of Medicine is a challenge, and to be a Pediatrician is more challenging. Patients as well as relatives are involved in the process, from start to end of treatment. When a child becomes ill, the whole family must adopt to a new way of life related to the illness. Families often seek ways to comfort their child during hospitalization such as entertainment, information and participation to some procedures (Pelander & Leinokilpi, 2004 ; Runeson et al., 2002). Certain questions need to be asked to arrive at a correct diagnosis. In the study of Cheng(2004), according to evidence-based approach, questions can be categorized into two (2): inquiries about general knowledge are called “background” questions and explorations bringing the patient’s diagnosis, treatment, and prognosis are “foreground” questions.

In this study, background questions are the initial approaches to any patient encounter. It does not only determine the history of present illness but it attempts to build rapport, trust and confidence among the relatives. Almost all the respondents start their encounter with introducing themselves and identifying concerns. Almost all respondents, discuss treatment extensively, probably because they know that therapeutic compliance is one if not the most difficult area of concern, similar to the study of Cheng, that problems with therapy occurred most frequently (Cheng, 2004).

Some respondents tried to identify the relatives capacity to understand the situation, assessed their ability to grasp simple medical terminologies and oftentimes translated these into Layman’s term. In a study on health promotion, concerns about discerning individuals’ perceptions and construction of events are the most effective way of understanding the skills of health related issues among health promoters (Raphael, 2000). Patients likewise understand medical information better when spoken too slowly, use of simple words, and when restricted amount of information is presented so as not to be confusing (Saefer & Keenan, 2005).

Appropriateness of traditional approaches in detecting and evaluating changes in the community and societal conditions that support health is now a growing concern. Hence, a lecture based or instructor based learning strategy may not be always effective. Majority of the respondents of this study start with a doctor centered approach and ending with a patient centered strategy, allowing relatives to ask questions, clarify issues, and confirm their previous knowledge of the disease. Health promotion changes are complex, emergent, and frequently unique to individuals and situations (Raphael, 2000). Illness of a child evokes strong emotions and expectations from parents. They desire information regarding their child's condition and treatment (Fischer, 2001). Hence, multiple methods or strategies are needed to engage relatives in the care of their patient.

Signature Pedagogies employ the types of teaching and have three (3) key characteristics. First, they have a surface structure, which is the act of teaching and learning. Second is the deep structure, which is the assumption of how best to impart a certain knowledge, and third is implicit structure, which is based on the beliefs and values, professional attitudes, and dispositions (Schulman, 2005). Meyer and Land (2003) in their study of teaching and learning stated that certain concepts are central to master a given subject. They named it "Threshold concepts". A threshold concept is transformative because it changes the learner's attitude. Once learned, it is irreversible, hence least likely to be forgotten, the third is integrative which learners uncover relationship and create connection between situations. Fourth is the application of knowledge as they challenge previous learnings with problems at hand.

This study was able to elicit threshold concept amongst the respondents. Most of them think that an initial approach may not always yield a positive outcome; however, deepening discussions and exchanging of thoughts will create change in attitude. Upon recollection of events, the relatives will realize and will be able to connect previous exposures to present illness and by doing so will avoid future occurrences as they are now empowered with knowledge.

Empowerment is a complex concept. People or families are empowered when they have a sense of control over their lives (Funnell et al., 1991). Health mentoring is a key intervention for promoting family health and empowerment of families (Raphael, 2000).

REFERENCES

1. Abdi, A., Izadi, A., Vafaei, K., & Lorestani, E. (2014). Assessment of Patient education barriers in viewpoint of nurses and general physicians, 8, 2252–2256.
2. Bailey, E. J., Cates, C. J., Kruske, S. G., Morris, P. S., Brown, N., & Chang, A. B. (2009). Culture-specific programs for children and adults from minority groups who have asthma. In *The Cochrane Collaboration* (Ed.),

Respondents from this study are united in their observations that good communication is necessary for an effective health promotion. This study uncovered that pre-service pediatricians have comparable mechanism of health mentoring. Importance of developing trust and confidence in the healthcare setting were highlighted since it was the method initiated first with each patient-doctor encounter. One of the specific tasks is to bridge the gap among physicians and relatives and this was accomplished by using languages that are easily understood. Aside from giving the best health care possible, each opportunity was handled with compassion as patients are treated as relatives somewhat following the golden rule "Do unto others as you would have them do unto you" (Matt. 7:12).

As medical students, soon to be physicians are equipped with information and rightful medical judgement. As interns, application of this knowledge as well as recollection of past experiences of the patient molds a physician to be understanding and humane. A pediatrician may follow standards of treatment or protocols set by their respective institution, society or as exemplified by senior physicians. These standards are again based on the individual's beliefs and moral values. Medical treatment does not end with discharging an improved patient improved but overseeing that therapeutic alliance is established and relatives are armed with health information.

To establish an effective health mentoring mechanism, one must be understanding, and to quote Harper Lee:

"You never really understand a person until you consider things from his point of view" (Harper Lee, 1926, American Pulitzer Prize-winning Novelist).

Not all patient encounters are the same, several factors are to be considered such as type of illness, age of the child, socioeconomic status, educational attainment of the relatives, and their views and beliefs about the illness. As pediatricians, one must be equipped with abilities to confront each situations. Even when one is knowledgeable but if there are difficulties with communication, health promotion; thus, mentoring will not be effective. Effective doctor-patient communication is a central clinical function and this is the heart and art of Medicine.

Cochrane Database of Systematic Reviews. Chichester, UK: John Wiley & Sons, Ltd. Retrieved from <http://doi.wiley.com/10.1002/14651858.CD006580.pub4>

3. Bhurji, N., Javer, J., Gasevic, D., & Khan, N. A. (2016). Improving management of type 2 diabetes in South Asian patients: a systematic review of intervention studies. *BMJ*

Open, 6(4), e008986. <https://doi.org/10.1136/bmjopen-2015-008986>

4. Bussey-Smith, K. L., & Rossen, R. D. (2007). A systematic review of randomized control trials evaluating the effectiveness of interactive computerized asthma patient education programs. *Annals of Allergy, Asthma & Immunology*, 98(6), 507–516.

[https://doi.org/10.1016/S1081-1206\(10\)60727-2](https://doi.org/10.1016/S1081-1206(10)60727-2)

5. Cheng, G. (2004). A study of Clinical questions posed by hospital clinicians, 92(4).

6. Duke, S.-A. S., Colagiuri, S., & Colagiuri, R. (2009). Individual patient education for people with type 2 diabetes mellitus. In *The Cochrane Collaboration (Ed.), Cochrane Database of Systematic Reviews*. Chichester, UK: John Wiley & Sons, Ltd. Retrieved from

<http://doi.wiley.com/10.1002/14651858.CD005268.pub2>

7. Friedman, A. J., Cosby, R., Boyko, S., Hatton-Bauer, J., & Turnbull, G. (2011). Effective Teaching Strategies and Methods of Delivery for Patient Education: A Systematic Review and Practice Guideline Recommendations. *Journal of Cancer Education*, 26(1), 12–21.

<https://doi.org/10.1007/s13187-010-0183-x>

8. Gaston, C. M., & Mitchell, G. (2005). Information giving and decision-making in patients with advanced cancer: a systematic review. *Social Science & Medicine* (1982), 61(10), 2252–2264.

<https://doi.org/10.1016/j.socscimed.2005.04.015>

9. Hawthorne, K., Robles, Y., Cannings-John, R., & Edwards, A. G. (2008). Culturally appropriate health education for type 2 diabetes mellitus in ethnic minority groups. In *The Cochrane Collaboration (Ed.), Cochrane Database of Systematic Reviews*. Chichester, UK: John Wiley & Sons, Ltd. Retrieved from

<http://doi.wiley.com/10.1002/14651858.CD006424.pub2>

10. Heinerichs, S., Vela, L. I., & Drouin, J. M. (2013). A Learner-Centered Technique and Clinical Reasoning, Reflection, and Case Presentation Attributes in Athletic Training Students. *Journal of Athletic Training*, 48(3), 362–371. <https://doi.org/10.4085/1062-6050-48.2.17>

11. Houts, P. S., Doak, C. C., Doak, L. G., & Loscalzo, M. J. (2006). The role of pictures in improving health communication: A review of research on attention, comprehension, recall, and adherence. *Patient Education and Counseling*, 61(2), 173–190.

<https://doi.org/10.1016/j.pec.2005.05.004>

12. Jin, J., Sklar, G. E., Min Sen Oh, V., & Chuen Li, S. (2008). Factors affecting therapeutic compliance: A review from the patient's perspective, 4(1), 269–286.

13. Khademi, G., & Abdollahpour, N. (2014). The Impact of Student-Centered Pedagogy on Training in a Pediatrics

Course. *International Journal of Pediatrics*, (4.3).

<https://doi.org/10.22038/ijp.2014.3728>

14. Khazaeipour, Z. (2016). Effective Teaching Strategies for Patient Education in Individuals With Spinal Cord Injury in Iran. *Archives of Neuroscience*, 3(1).

<https://doi.org/10.5812/archneurosci.28211>

15. Lom, B. (2012). Classroom Activities: Simple Strategies to Incorporate Student Centered Activities within Undergraduate Science Lectures, 11(1), 64–71.

16. Long, M., Blankenburg, R., & Butani, L. (2015). Questioning as a Teaching Tool. *PEDIATRICS*, 135(3), 406–408. <https://doi.org/10.1542/peds.2014-3285>

17. Marcus, C. (2014). Strategies for improving the quality of verbal patient and family education: a review of the literature and creation of the EDUCATE model. *Health Psychology and Behavioral Medicine*, 2(1), 482–495.

<https://doi.org/10.1080/21642850.2014.900450>

18. Mc Cann, D., & Blossom, J. (1990). The Physician as a Patient Educator: From Theory to Practice, (153), 44–49.

19. Meyer, J. H. F., & Land, R. (2005). Threshold concepts and troublesome knowledge (2): Epistemological considerations and a conceptual framework for teaching and learning. *Higher Education*, 49(3), 373–388.

<https://doi.org/10.1007/s10734-004-6779-5>

20. Moret, L., Rochedreux, A., Chevalier, S., Lombrail, P., & Gasquet, I. (2008). Medical information delivered to patients: Discrepancies concerning roles as perceived by physicians and nurses set against patient satisfaction. *Patient Education and Counseling*, 70(1), 94–101.

<https://doi.org/10.1016/j.pec.2007.09.011>

21. Oyetunde, M. O., & Akinmeye, A. J. (2015). Factors Influencing Practice of Patient Education among Nurses at the University College Hospital, Ibadan. *Open Journal of Nursing*, 05(05), 500–507.

<https://doi.org/10.4236/ojn.2015.55053>

22. Rathert, C., Mittler, J. N., Banerjee, S., & McDaniel, J. (2016). Patient-centered communication in the era of electronic health records: What does the evidence say? *Patient Education and Counseling*.

<https://doi.org/10.1016/j.pec.2016.07.031>

23. Russell, A. T., Comello, R. J., & Wright, D. L. (2007). Teaching Strategies Promoting active learning in Healthcare Education, 1(1).

24. Safeer, R., & Keenan, J. (2005). Health Literacy: The Gap between Physicians and Patients, 72.

25. Shulman, L. S. (2005). Signature pedagogies in the professions. *Daedalus*, 134(3), 52–59.

<https://doi.org/10.1162/0011526054622015>

26. Theis, S. L., & Johnson, J. H. (1995). Strategies for teaching patients: a meta-analysis. *Clinical Nurse Specialist CNS*, 9(2), 100–105, 120.

27. Weber, H., Stöckli, M., Nübling, M., & Langewitz, W. A. (2007). Communication during ward rounds in Internal Medicine. *Patient Education and Counseling*, 67(3), 343–348. <https://doi.org/10.1016/j.pec.2007.04.011>

28. Zandbelt, L. C., Smets, E. M. A., Oort, F. J., Godfried, M. H., & de Haes, H. C. J. M. (2007). Patient participation in the medical specialist encounter: Does physicians' patient-centred communication matter? *Patient Education and Counseling*, 65(3), 396–406. <https://doi.org/10.1016/j.pec.2006.09.011>