The Suruhanu and Suruhana of the Commonwealth of the Northern Mariana Islands

EDCS 606

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INTRODUCTION

Growing up in Saipan, I often heard stories about the *taotaomona*¹. I was told that we had to respect the *taotaomona* because they could harm us if we were intentionally disrespectful. Later, I learned that the *taotaomona* were also helpful and kind to those who possessed a gift to heal. The local healers of our islands are called the *suruhåno* and *suruhåna*, the male and female healers, respectively. These healers use local plants and spirituality to concoct medicines for our ailments. This paper describes the practices of the *suruhåno* and *suruhåna* to lay the foundations for creating a mathematics curriculum for grades 4 and 7.

As a child, I vividly remember receiving one such medicine from my Nan² Chai, my great-grandmother's sister. She would give my mom the most bitter, awful-tasting green medicine for our family. Sometimes, we would receive the liquid form of the medicine and my mom would refrigerate it and force us to drink it daily until we drank it all. Sometimes Nan Chai would give my mom the raw form of the medicine in wrapped gauze (to act as a sieve) for my mom to place in hot water and brew the "tea". It wasn't until I started this project that I realized that my Nan Chai was a *suruhåna*. Nan Chai has passed away but her son, Rodrigo Mundo Castro (Uncle Digo to me) has received her knowledge and continues the practice of local healing. Many of the healers in the community today receive their knowledge from their parents, grandparents, godparents, aunts, or uncles. A few healers receive their knowledge from different

¹ Literally translated to mean "the people who came before us". They are the ghosts of our islands.

² When "Nan" is used in front of someone's name, it shows that the speaker is being respectful of the person being named. It usually is used for aunts or elder ladies of the community.

suruhåno and *suruhåna* in the community. With this knowledge, they are expected to aid members of the community who enlist their assistance. Many healers feel that the practice of local medicine is not as prevalent as it once was due to several factors: westernization, urbanization, and secrecy. However, one *suruhåna*, Rebecca Maratita Norita, from Sinapalo II, Luta believes that the practice is not dying. She states that many people ask her to help them.

The decline of the practice due to westernization lies in the perception that most people, especially the younger generations, give more credibility to hospitals. These people usually do not enlist the assistance of our local healers unless the hospitals cannot heal their loved ones. Additionally, hospitals tend to be more convenient than the local healers. Many healers find that it can be difficult to practice when the plants needed are dying out due to urbanization. Fermina Ogo Blas of Songsong, Luta, a suruhåna, pled with the local college to research ways to bring back the healthy gaogao plant (Borja & Roppul, 2009). On April 1, 2010, I called the local college in Rota to find out the status of bringing back the *gaogao* plant. The person I spoke to is in charge of pest management. He states that he attended the local healers conference held in Rota and remembered Fermina Blas's plea. He is working diligently on the study of pests in Rota to help keep the plants alive. According to Maricel Quintanilla, an entomologist at NMC CREES (Cooperative Research, Extension and Education Service), the only way to save the *gaogao* plant is to let the pests eat all of the plants and then let them die when no more gaogao trees are left. Once this has been accomplished, new gaogao trees would have to be planted (Agpoon, 2009). This is testament to the concern of the community

about our local plants. A few healers feel that the secrecy of the practice is one of the reasons the practice is dying. They feel that public education is vital, "It is good for children to be educated. It is good to integrate native medicine with the health and science curricula in the schools," says Carmen Matagolai Toves, a *suruhåna* from Sinapalo II, Luta (Borja & Roppul, 2009, p. 517).

METHODOLOGY

My interest in researching about our local healers began with my desire to talk to my Uncle Manny Flores Borja, my grandfather's brother. I thought he would be a wealth of knowledge of local practices because he is an elder in our community. When I mentioned this to my father, he told me that Uncle Manny would also be a good source to talk to about local healers because he was compiling a book on our local healers. I was pleasantly surprised to learn this. During our interview, I learned that the book was done! I immediately purchased a copy and began reading.

The book, "Directory of Traditional Healers and Medicinal Plants in the Commonwealth of the Northern Mariana Islands" by Manuel Flores Borja and Jose Somorang Roppul captures the different stories of the different healers on our islands. It is my primary reference. One of the healers not mentioned in the book is Evelyn Benavente (Benavente, 2010) of As Lito, my mom's second cousin and *kumaire*³. My mom informed me that she is a *suruhåna*. As a result, I decided to interview her and

³ *Kumaire* is the term used to call a lady who is the godmother of one of your children or if you are the godmother of one of her children

observe her as she practiced on me. Below are some of the questions I planned to ask

her during our conversation:

INTERVIEW QUESTIONS

- Name
- Village
- Where did you get your power/knowledge from? Can you trace back further? Are you planning (or have you done so already) to pass down your knowledge? To whom? Why that person? Or if not, why not?
- Is there a systematic way of classifying medicines? How would you describe your medicines? What are "hot" ailments? What are "cold" ailments?
- How do you count the ingredients when collecting?
- Can you talk about plants that may be confusing such as the *gaogao*? Do you rub them to know the difference? What do you look for?
- How do you organize your plant knowledge?
- Do you have your own garden? Where do you get your plants?
- Do you still practice? How many people come to you?
- Do you feel the practice of local medicine is dying? Why or why not?

After my first visit with Aunty Evelyn, I was able to ask some of the questions and I was able to ascertain almost all of the other information through our conversation. It wasn't until the second interview that I was able to get all my questions answered. This first interview was completely filmed. Additionally, Aunty Evelyn provided me with a "book" from one of the local healers from Saipan who moved to Guam. The "book" was created in 1927.

The second interview was more of an observation. I wanted to observe her

practice her local healing on me. She prepared an herbal sauna for me. During this

observation, I was looking for anything mathematical in what she was doing.

It is difficult to ascertain whether my research is sufficient for the development of math curricula. I feel that it is sufficient but I may be missing some aspects of healing because I haven't had an opportunity to observe other instances of healing. However, I feel it noteworthy that although this topic is of high interest to me and may be of high interest to most 7th grade students and some 4th grade students, I am not convinced it would be of any interest to 1st grade students. Math curricula can definitely be developed for 1st grade given the information presented in this paper, but I feel that another topic like *going to the beach* would be of more interest to a 1st grade student. As such, I feel that another paper like this, but about *going to the beach* should be written for the 1st grade math curriculum development. I say this because if the purpose of this grant and these studies is to increase test scores through increased understanding of mathematics through meaningful and relevant mathematical experiences, medicine may not be very meaningful to a 6-year old.

There are many topics of interest at the beach that can be used to write a mathematics curriculum. Students could explore shells, fish, waves, the sand, and even depth of the sea. Students could even relate to the preparation involved in going to the beach: number of towels needed, food needed, and even the amount of sleep needed the night before to be able to get an early start.

DESCRIPTION

Our local healers are both male and female. Their ages range from the early thirties to the eighties. All healers receive their knowledge from a closely related family

member, usually from their parent or grandparent but sometimes from an aunt or uncle or their *Nina* or *Nino*⁴, or from a group of elders in the community who sensed that the particular person had an affinity for learning the art and science. Learning to be a healer requires understanding the forest, knowing what the different plants look like, where they can be found, what their properties are, the quantities needed to concoct the medicines, the time of day or year the medicine can be procured, the method required to concoct the medicine, the knowledge of how to use the medicine, and spiritual belief.

From the readings, there seems to be two types of medicines: those that are "the same as the Tylenol kind of medicine... like regular kinds of medicine" and those that are "not so good to disseminate to the public." (Borja & Roppul, 2009, p. 112) The medicines of the Tylenol variety are further described as those that can be used regularly for general health purposes. Most healers agree that these are good for all to know and concoct at home. However, many healers feel that the medicines that are more complicated in nature (either in the finding of the plant, the concoction of the medicine, or in the dispensing of the medicine) should not and cannot be revealed to the general public. Some healers strongly believe that revealing any of the medicines in their totality would strip the healers of their powers to heal.

Unlike pharmaceuticals and hospitals, healers do not typically make the medicine in bulk. They wait to be asked for healing. When asked, they will take a walk in the forest or their garden or wherever the necessary plants can be found. However, some healers sense that a particular medicine (especially if the medicine is a general

⁴ Nina is the name used for godmother and Nino is the name used for godfather

purpose medicine) will be needed on a particular day or week and they'll make more so that when the ailing walk in, the medicine is ready for dissemination. Forest walks, according to all healers, require solemnity. Some healers spoke of the forest "hiding" the plant from them if frivolity was on their minds. All healers referred to "asking" when taking medicine from the forest or even from their gardens. Some healers ask God, others ask God and their ancestors, while others ask just their ancestors. Ancestors vary from the general ancestors (all who came before us and protect us) or specific ancestors (such as those who passed the medicinal knowledge to the healer).

According to Donald Mendiola (Mendiola, 2010), a local *suruhåno*, beginning healers typically have to fast one meal to further prepare for the *saffi⁵*. More experienced ones do not need to fast. Fasting includes food, alcohol, and any other impurities. The healers do this to help strengthen themselves against the spirits. Some healers also prepare themselves for the healing by drinking the same medicine as the person who will be treated. This helps them guard against the illness traveling to them.

Once all necessary ingredients are acquired, the process of creating the medicine begins. Some healers say that certain medicines require a spiritual prayer or chant while making the medicine, especially if the illness or ailment is severe. The prayer or chant strengthens the power of the medicine and protects the healer from getting the illness or ailment. Some healers say that certain medicines will turn certain colors indicating whether the medicine will work or not. Others say that some colors of certain plants (after boiling or while pounding) indicate the severity of the illness.

⁵ Saffi is a type of healing done by some suruhanos and suruhånas when the healing required deals with spirits.

Once the medicine is ready, the healer dispenses the medicine directly to the sick person, giving him/her instructions on how to use the medicine (quantity and frequency) and where to place the medicine while it's not in use (refrigeration or by a spiritual statue). Other medicines require the healer to chant a spiritual prayer while the patient ingests or rubs the medicine in the healer's presence. Sometimes, the healer cannot let the patient ingest or use the medicine in the healer's absence because of the severity of the ailment. In those cases, the healer must also ingest or use the medicine to prevent the sickness from befalling him/her. Finally, some medicines require the healer to chew the concoction and blow the medicine onto the place that needs healing. Plants

When using local plants, it is imperative that the healer can identify the plant. Some plants must be identified by the stage of their growth. Certain medicines require the use of the plant when the leaves are shiny or when the plant is newly sprouted or when the plant is wilting. Some plants cannot be harvested unless they are in season.

Different parts of the plant are required for different medicines. Roots, leaves, and tips are most often named when identifying what part of the plant is to be used. However, the whole plant is sometimes necessary.

Some of the plants used in the concoction of local medicines include: *batbena* (wild clary or heliotopium indicum), *gaogao* (coral tree, tiger's claw or erythrina vareigata), *pupulu* (betel pepper or piper betel), *and tumåtes cha'ka* (sunberry, pygmy groundcherry, wild cape gooseberry or physalis minima). Each of these plants can be described by its luster, its vein patterns, its proximity to the ground, the flower it

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blooms, where or when it can be found, its fragrance, and sometimes by the way it reacts to pounding, rubbing, or boiling. Different plants could be placed in a 1st grade unit on algebra where students can "Sort and classify objects using one attribute (e.g., color, size, shape)" (CNMI, 2008)⁶

Measurements (Acquiring the Plants, Making the Medicine, and Dispensing the Medicine)

Measurements required when collecting plants, making the medicine, and dispensing the medicine vary among the healers. Some healers use numbers when identifying the number of leaves or plant parts needed while others use a "fistful" to describe the quantity needed. All healers distinguish quantities based on size of the plant part, for example, "For Åmot Tininu, combine… noni fruits (4 small ones or 2 big ones), …" (Borja & Roppul, 2009, p. 527).

The numbers used vary among the healers. From the recipes provided, it is evident that only even-numbered leaves or plant parts are required of some healers. Yet, one healer described that she was taught only odd-numbered items were allowed. Healers acknowledge that different healers use different methods and sometimes different ingredients for the same medicine. They realize that they cannot heal all the sick people that come to them. They simply do their best and if they notice no improvement in the health of the patient, then they recommend the patient find a different healer. In fact, a *rifa*, who is a healer who also deals with the illnesses caused

⁶ Commonwealth of the Northern Mariana Islands Public School System Benchmarks, 1.2.1

by spirits, can be sought out if an individual wants to know which healer could best heal his/her ailment.

Many healers speak of numbers as not being so important but rather the "same" number should be used again and again. For example, if 2 leaves from the *gaogao* tree are used, then 2 leaves from the *batbena* plant must be used also. Some healers speak of cutting stems or sugar cane into sixteenths or some other fractional number. They describe the cutting as beginning with half and then cutting the halves into half and so on until the desired number of equal parts is acquired.

Once all the preparations for the medicine have been done, the healers then "cook" the medicine. Most medicines require the healer to grind the ingredients in a bowl using a stone mortar and pestle and boil them in water and tea (to ease the bitterness for the patient) for a prescribed number of minutes. Other medicines require the pounding of the ingredients in a bowl and wrapping the end-product in gauze for the patient to make his/her own tea or to dip in hot water and squeeze a prescribed number of drops into the patient's mouth. All healers tell their patients how much medicine to ingest or apply and how often.

Interview with Evelyn Benavente

During the interview with Aunty Evelyn, I heard many of the same types of things I read in "Directory of Traditional Healers and Medicinal Plants in the Commonwealth of the Northern Mariana Islands". She considers herself to be *suruhåna* whose focus is on herbal healing, through the power of God. Her knowledge to heal came from her mother, Tun Franciscon Supiano from Chalan Pago, Guam, and from my great aunt, Nan Chai Goru. Aunty Evelyn received some of her knowledge from the very lady who gave us our medicine as children. Although Nan Chai has passed away, Aunty Evelyn still collaborates with her son, Uncle Digo, one of the *suruhånos* listed in the Directory. I was not aware that collaboration occurred among some of the healers. One of the other *suruhånos* listed in the Directory is Donald Mendiola, the child of her husband's oldest sister. I asked Aunty Evelyn if she collaborates with Donald. She said that he is a very good and powerful healer but that she does not like to collaborate with him because he is a *rifa* and she does not want to invite the spirits into her life. She only wants to deal with the powers of herbal healing.

As she ages, she realizes that her knowledge cannot just stay with her. She has invited her son to learn the art and science but states that her son is more interested in healing through massage. She encourages her son and is supportive of endeavors like the one through the MACIMISE project. However, she warns that novice healers should take with them pictures of plants when collecting herbal medicine because there are poisonous plants that closely resemble some of the plants used and she does not want anyone to die because of erroneous plant identification. To this end, she strongly suggests that novices continue to ask the advice and assistance of experienced healers until such time that the novice is ready to work on his/her own.

Through our conversations, it became evident that her medicines were classified by what they healed: primarily "hot" ailments and "cold" ailments. From my readings, my conversation with Aunty Evelyn and numerous other locals in the community, "hot" ailments come from "hot" food such as caffeine, watermelon, and hot pepper. These ailments cause your body to heat up from within and make you more susceptible to allergies. Certain plants counter this "heat". These plants cool the body and allow the allergies to settle and bring the body back to its natural state. "Cold" ailments do just the opposite and occur only to women. "Cold" ailments are usually caused when women don't keep warm, especially during their menstruation. Some ailments are specific to women such as irregular menstruation and the inability to conceive.

Aunty Evelyn has planted most of the plants that she needs in her own yard. She has done this for convenience. Whenever she needs a plant, she knows exactly where she planted it and she can easily obtain what she needs for the medicine. Some of her plants had died while others spread throughout her yard during her absence from Saipan while she was attending to her son who was away for college. When her son returned, she returned with him and has since tended to her garden again.

As we walked through her garden, she pointed out the different plants, told me their names, told me about the different types of medicines they can be used for, and sometimes about the history of the plant. Her *gaogao* tree, for example, came from Nan Chai Goru and one of the plants that she recently transplanted to a shadier area came from the beach. As she told me about the different types of medicines they could be used for, she sometimes provided details about the amounts of each plant or plant part. She told me that she can only use odd-numbered plants or plant parts. As I had read this in the Directory, I asked her why. She said it was because that was what she was told and that is what works.

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Today, Aunty Evelyn is a practicing *suruhåna*. In the past, although she knew she had the gift, she did not want to use it all because she did not want people coming to her and asking for help. She was busy. She had a full-time job and a son. However, one day her son became very ill. She and her husband continually took him to the hospital because the medicines they gave him were not working. Finally, her husband told her to use her gift to help their son. She thought about it and acquiesced. Almost immediately, her son became better. From that moment on, she decided to quit her job and become a full-time *suruhåna* to help others. In the beginning, she kept a log of all the people she helped and what kind of medicine they took, to help her keep track of her patients. Today, she no longer does this. However, she still helps anyone who asks. Like other healers, Aunty Evelyn believes that the local people still believe in traditional medicine, but many are lazy and do not want to take the time to visit the *suruhåna* or *suruhånu*. They would rather go to the hospital and obtain some quick-fix pills.

OBSERVATION NOTES

When I arrived at her house, I noticed three pots of water on the stove. Two of the pots were done boiling and one pot, which had 13 noni leaves and grated coconut in water in water, was still simmering on the burner. When the concoction was cooked, Aunty Evelyn prepared the "sauna" room by placing me in an alcove in the garage where no wind was blowing. She put her bed sheet in the dryer to warm it for the sauna. A garden chair (one of the plastic chairs which are well ventilated) was placed in the alcove with the small gas stove and a pot of lemon grass placed underneath the chair. Before I began the sauna, the entire surface area of my body was rubbed with the noni and grated coconut concoction. Once I was covered, I was told to sit on the chair with the steam from the pot rising through the chair while the bed sheet was placed over my head and my entire body. During this time, she massaged me and turned off the fire. She massaged me for a little while longer then told me to stay seated and covered for another 15 minutes.

When she came out again, she had in her hand a glass of herbal tea for me to consume. I had to drink the entire glass before more massaging. After the final massage, I was given a water bottle filled with the herbal tea to drink before going to bed and in the morning.

Mathematical Ideas

In the CNMI, a book of Standards and Benchmarks exists for every subject area. When I started teaching in 1998, these standards and benchmarks were already in existence. I recall attending workshops designed to get teacher representatives from different schools to reflect on the current standards and benchmarks and amend them if necessary. In mathematics, this has been a long and arduous journey. Our benchmarks began with very general standards that were left to the interpretation of the educator. As mathematics education was not progressing in the CNMI, the leaders of PSS decided that the benchmarks needed to be written to be more specific. After many years and many revisions, the standards and benchmarks that will guide me as I think about the mathematics in the 4th and 7th grades in the CNMI.

The standard on *number sense* can be explored through traditional healing. In the 4th grade, students can study fractions and their conversions, the practice of adding, subtracting, multiplying, and dividing, and the application of ratios, proportions, and percents. Under the *algebra* standard students in the 4th grade can explore concepts in "4.2.1 Know that equals added to equals are also equal" (CNMI, 2009, p. 12) while problems involving data can be used to graph linear functions in 7th grade. Students in the 4th grade can explore the *measurement* standard through the discovery of area and perimeter when discussing where plants grow and under what conditions or perhaps if one wanted to grow his/her own plants at home. Volume can be investigated with many of the teas concocted. Although the application of *geometry* may not be so obvious, 4th grade students can examine symmetry in leaves when learning to identify the different plants. This concept can be further explored in the 7th grade when rotational symmetry is further analyzed along with other rigid transformations. Dilations can be explored if 7th grade students are tasked to dilate a plant image. Finally, the standard of *data*, *statistics*, *and probability* can be studied if 4th grade students collect data, create tables and graphs, and interpret and compare different data sets. In the 7th grade, these data sets can be further dissected and displayed using stem and leaf plots. These students can begin to evaluate data claims and consider any graphical misrepresentations (Benchmark 7.5.3, CNMI, 2009). Seventh grade students can "Use observations about differences between two or more samples to make inferences about the populations from which samples were taken" (CNMI, 2009, p. 35). This can be done

especially if 7th grade students from the other islands collect data and collaboration

among the different schools could occur.

There are many opportunities for mathematical exploration, discovery, and

analysis through the study of our local healers.

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