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Research Article

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Accelerating Indigenous Aeta Women's Health Awareness

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ABSTRACT

This research paper examines the capabilities, barriers, and the collaborative work that accelerate indigenous Aeta women's health awareness. Specifically, it has the following objectives: to describe how indigenous Aeta women demonstrate their capabilities in responding to their own and their family's health needs; identify the barriers to indigenous Aeta women's health awareness; and analyze how collaborative work among individuals, families and groups accelerate indigenous Aeta women's health with minimal mobilizing intervention from philanthropic entities outside their communities.

The research study found that the barriers to the acceleration of indigenous Aeta women's health development is the lack of health awareness. The basic needs of indigenous Aeta women and their families were partially addressed through the collaborative efforts among the donors, instructors, beneficiaries and the Esposo-Ramirez Family Social Responsibility (ERZ) community development enablers by providing water, light, sanitation, health and support for education.

Although the Aeta women rely heavily on herbal plants for their health needs, access to government medical facilities should be considered. Over the past decades, the use of herbal medicine has increased in more than 80% usage worldwide. The Aeta women can be trained to collaborate in systematic gathering and preservation of herbal plants. This is not only a great contribution to the field of medicine and pharmacy, but can also benefit the Aeta women from economic inclusion.

Keywords: Indigenous Aeta Women, Health

Introduction and Background

While millions of people all around the globe are already living in the era of 4th Industrial Revolution, the Aetas of Castillejos, Zambales are still wanting in basic needs. Several aspiring and well-entrenched politicians occasionally distribute some groceries and some cash during election period. Yet, these have not improved the lives of indigenous Aeta families, particularly the women. Some mechanisms were put in place after the Mt. Pinatubo eruption in 1991, but such efforts only fizzled out after some time.

Philippine Republic Act (R.A) No. 8371 The Indigenous Peoples' Rights Act of 1997 was enacted to "provide full access to education, maternal and child care, health and nutrition, and housing services to indigenous women (Sec 25)." In addition, the R.A. No. 11223 Universal Health Care Law was enacted in 2019 implemented by the Department of Health.

Focusing the lens on the health of women, this research paper examines the capabilities, barriers, and the collaborative work that accelerate indigenous Aeta women's health awareness. Specifically, it addressed the following questions:

- How do Aeta indigenous women demonstrate their capabilities in responding to their own and their family's health needs?
- What are the barriers to indigenous Aeta women's health awareness?
- How can collaborative work from individuals, families and groups accelerate indigenous Aeta women's health?

There is greater chance of stability and sustainability of projects for Aeta indigenous women if community responsiveness and systematic collaboration are ensured among concerned individuals, families and groups. Their initiatives and activities can be centered on good health. Literature, studies and statements prove this.

Archbishop Ivan Jurkovič highlighted that Indigenous people experience some of the highest rates of poverty, which makes them more vulnerable, not only to the COVID-19 pandemic, but also to other current challenges such as climate change and natural

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disasters. Further compounding the situation, the ongoing health crisis has forced restrictions on movement, which has increased food and water insecurity and hindered access to medical supplies among these hard-hit communities. Indigenous communities, he affirmed, are "principal dialogue partners and should be included in all decision-making processes at the political level, especially those affecting them directly" as they are not "merely one minority among others" [1].

This qualitative study describes the capabilities, barriers, and collaborative work that accelerate indigenous Aeta women's health awareness.

To show appropriate respect by outsiders wanting to learn more about the indigenous Aeta women through elicitive and extractive means, rapid rural appraisal was conducted in close collaboration with community members who shared their ideas about how they are as indigenous women and what they need to improve their lives [2]. Continuous information gathering occurred at different times during the intervention period from March 2020 through June 2022 so as not to divert Aeta women participants from their cultural identity, beliefs, and practices.

In accord with efforts aimed at local ownership, control, and capacity building, the indigenous Aeta women were the source of information who participated in decision-making regarding priority needs, usage of intervention, sustainability measures, and selection of poorest beneficiaries. Each project cycle included needs assessment, design and planning, implementation, monitoring, and evaluation. Reports per activity and intervention summarize the implementation and evaluation.

To be able to address the question, "How do indigenous Aeta women demonstrate their capabilities in responding to their own and their family's health needs?" this researcher explored the role of women in their indigenous habitat, the common health problems and solutions, particularly the herbal plants used to treat ailments. Distinct customs, spirituality and beliefs in relation to health are also discussed based on interviews with the Aeta women.

To identify the barriers to indigenous Aeta women's health awareness, analysis of their lack of health awareness is tackled. Data here are also based on interviews and observation of the women's activities.

In analyzing how collaborative work from individuals, families and groups accelerate indigenous Aeta women towards good health, description and narration were utilized. There is a lengthy description of initiatives taken by the Esposo-Ramirez Family Social Responsibility (ERZ) from 2019 through 2023. Development activities that were implemented with the support from donors and sponsors are here discussed. Feedback from the beneficiaries is here included and analyzed.

Results of the analysis yielded lessons on good health of indigenous Aeta women, on the basis of which, conclusions were drawn and recommendations were given.

The Indigenous Aeta People

The Aetas are the earliest known inhabitants of the Philippines. These Indigenous people are a nomadic people, dark-skinned and curly-haired; small in stature and skilled in hunting and jungle survival. The Aetas in Castillejos reside in the lowlands and mountains that are part of Barangay San Pablo, the third most populous barangay with a total population of 11,139 in the 2020 census. More than 20 years ago in 2000, the Aeta population was 7,647 with 3,751 females. No recent data is available.

Aetas reside in several sitios in Barangay San Pablo-Bagong Silang, Maowao, Mambugan, Balenting, Papaya, and Amianan in San Isidro and Sitios Nilasin, Kamanggahan, Kakilingan, Lomboy, Maage-age in Kanaynayan in the mountain ancestral land. There are chieftains, pastors, and Aeta elderly leaders who lead the communities on matters of religion, decision making, indigenous practices or political affairs.

During the early months of the COVID-19 pandemic, the Aeta families received *ayuda* (relief goods) from local and provincial governments. They observed pandemic protocols such as wearing of face masks, but not social distancing, as they are close together in the *kulong kulong* (motorbike with sidecar) and in the marketplace. Since March 2020, the series of lockdowns limited their selling in the market to two to three days a week. Some of them use *kulong kulong,* mainly to transport their products to the market and for personal use.

The Indigenous Aeta women's Capabilities in responding to Their Own and Their Family's Health Needs

(Ramirez 2022) Describes the life of Aeta women and their families [3]. They have access to vast areas of livelihood resources, both within their residence area and in neighboring areas like (ancestral land or swidden farms) and *lahar* (area near volcanic debris). The Indigenous Aeta women play multiple roles as workers and primary care providers. A regular day is spent cooking, washing clothes, tending the children, animals and plants. Occasionally, they go to *gasak* either to plant or harvest crops that they sell in the market. Most of the day, they are exposed to the heat of the sun. Their thatched roof homes allow for fresh air but cannot protect them from the hot air in the mountains. This lifestyle accounts for disease risk factors.

Their common health problems, according to Barangay Health workers are cough, cold, flu, and diarrhea. Another health worker who is immersed in different areas of Aeta families, adds to these fever, ear infection, sore throat, headache, stomach ache, allergies, conjunctivitis, wound infection, urinary tract infection, and anemia. Some children are malnourished. The pregnant women lack vitamins and need laboratory tests and pre-natal care. The Rural Health Unit has a doctor but no medication is given after consultation. (Personal communications with Merlyn Andajare and Melanie Gonzalez, Barangay Health Center 25 May 2023).

Government provides free consultation and hospitalization for Aetas in San Marcelino District Hospital, next town to Castillejos. X-ray and Lab tests conducted in private Laboratories are covered by government funds. However, medicines and antibiotics are given only when available. In most cases, the Aetas do not complete the prescribed antibiotics because they cannot purchase the full prescription. For minor illnesses, the Aetas do not go for medical consultation due to lack of money for transportation and medication.

Until 2025, the ecosystem was affected by the Chicken Growing and Dressing Plant located in two Sitios where Aetas reside. There was no record of Aetas working in this large Plant. In December 2022, numerous dogs died from eating the rejected chicken parts that were dumped outside the Plant. The Aetas had no choice but bury the contaminated dogs. The private lands around the hectares of land donation from former governor Amour Deloso 20 years ago were used for human waste disposal which, naturally offends the owners. Eventually, the owners surrounded their property with fence to prevent entry of the Aetas. The Aetas were then faced with the problem of where to go for human waste disposal.

Herbal Solution to Ailments

Herbal medicines recommended by the elderly are widely used among the Aetas. Certain plants are used for various women's health problems, such as menstrual disorder, labor induction, postpartum relapse, and lactation. Some plants are commonly used for medicinal preparation for decoction, infusion for therapeutic purposes, or oil extract. Among the women and their families, there is heavy reliance on home health treatment using herbs and medicinal plants. Following are some examples of plants that are either eaten, boiled, crushed or applied to the skin for treatment or prevention of specific illnesses.

There are herbal plants for women's pregnancy and birth giving. Calabash is patched on to the abdomen or hips of a pregnant woman to prevent miscarriage. After giving birth, the mother drinks *binunga*, bamboo leaves or *banglit* roots. *Pitopito* is used to bathe the mother. They also boil guava leaves and use its vapor to prevent infection. Guava leaves are also used to heal wounds or as antiseptic or mouthwash.

For erectile dysfunction and for sexual activity, *tugatoy* root is used. Certain roots are used as potion with have magical sexual power. *Makahiya* plant serves as contraceptive. They boil the roots and drink its juice everyday throughout the menstrual period. After circumcision, mothers make their boys drink juice of guava leaves.

For urinary tract infection and enlarged kidney stones, they use pandan leaves, *alyabon* or *sambong*. When combined with *makahiya*, it can cause abortion. For high blood pressure, *hapayaw* roots are boiled and drank. Amoebiasis, kidney stones, high blood pressure, diarrhea, bloody stool are treated using linga-linga, *kalahaka, ar aritos, bulikidik,* or *dayangdang*. For gas pain, they boil tebey leaves and drink the juice. For conjunctivitis, they use *sampaloc* leaves. To treat skin allergies and mumps, they apply ground red pepper on the skin or use patches of *sigarillas* leaves.

For anemia, they use malunggay leaves. *Liyoken* is for toothache and for cleaning the tongue and is good for persons suffering from relapse. Balete roots, *lingi* and *kamias* leaves are the alternatives. *Lagundi* is good for cough and cold. They put the leaves on top of boiling rice and when it softens, they squeeze it and drink the juice. Cashew leaves are used as forehead patch when a person has headache. Cactus is patched on both sides of the body when a person has fever.

Tubatuba leaves are used for fracture patch and for treating mouth sore. *Sabiddukong* roots are boiled for drinking when a person has epilepsy. As for wounds and skin disease, they burn the skin with hot coal.

Distinct Customs, Spirituality, Traditions and Beliefs

Animism is the belief that creatures, plants, animals, rocks, weather systems, and others are animated and alive, they possess a distinct spiritual essence. Because animism is strong among the indigenous Aeta women, there are specific plants that protect them from malevolent spirits or from harming the 'old man of the mound' (*nuno sa punso*), offending the spirits (*nakabati*) or being the target of witchcraft (*kulam*).

Also noteworthy is the belief in *Usog*, a concept shared among Aetas. It is a force or energy that a human being can transmit unintentionally. Some believe it comes from bad spirits or dwarfs. When a person shows the symptoms of stomach ache, head ache, vomiting, only the saliva from the person who caused the *usog,* is the cure. Women and their children wear *amyong* as a necklace or bracelet made of aromatic seeds as a protection from *usog.*

Figure 1: Aerial view of location of Aeta communities and Aeta houses

"Kulam," which means bewitched or cast a spell on, is considered folk magic. *Ubol* or *takipan, atis leaves, kakawate* or *madre de cacao* is all treatment for *usog, nakabati ng nuno sa punso* (offended the 'old man of the mound') or *laman lupa* (earthbound creatures). They also use *paraya* leaves patched on the painful area of the body that was inflicted by unseen spirits.

Aeta elderly women, Ligaya Soria and Myrna Ulila (May 2023), reveal that there are herbal medicines that have been tried and tested through generations of certain families. When they are called for healing, they just bring the roots and do not show the leaves to prevent exposure of their secret herbal medicines. Their right to this practice is safeguarded by Section 34 of R.A. 8371, which states that indigenous women shall have the right to special measures to control, develop and protect their "traditional medicines and health practices, vital medicinal plants, animals and minerals, indigenous knowledge systems and practices, knowledge of the properties of fauna and flora."

This does not mean they completely disregard hospitalization and prescription medicines. In cases of birth giving, heart attack and other emergency situations, the sick person, together with several members of the family, drive their *kulong kulong* 20 minute-drive in high speed to get medical treatment at the Emergency hospital located next town. This prompted the San Marcelino Emergency hospital to provide shelter where the Aeta relatives can stay during the days of patient treatment.

The Barriers to Aeta Women's Health Awareness

Lack of Health Awareness: The Aeta women practice healing through herbal plants and they pass on these practices to their children. While this has worked for them through several generations, there are illnesses that require antibiotics, x-ray, laboratory tests, surgery, first aid and other medical procedures. Their heavy reliance on herbal medicine and the cost of medicines are barriers to their access to medication. Worth mentioning here is their misconceptions about vaccination. They think that vaccine can kill rather than heal. This explains the incident in October 2020 when health workers went to Bagong Silang to administer anti-COVID-19 vaccination, the Aeta women and their families fled to the mountains in fear. It was only when the LGU prevented entry to the market, government agencies and business establishments by unvaccinated people that they finally agreed to vaccination.

Figure 2: Indigenous Aeta women and their children in Castillejos, Zambales

Although the pregnant women are advised by the health center workers to go to the hospital for pre-natal and child birth, Aeta women wait until they can no longer move from their home to give birth. The Barangay midwife then provides medical and health assistance for labor, birth and after the baby is born – all done in the Aeta's nipa hut. Since the home neither has the facility, nor space for birth giving, this practice poses danger to both mother and child.

As regards hygiene and proper waste disposal, these people also have no toilets and have survived many decades without this basic necessity. It can be recalled that 12 years ago, the Chieftain of the Aetas of Sitio Bagong Silang requested government to provide one toilet for their use. Until 2022, there was not a single toilet constructed for their use. Human waste is discharged and disposed anytime and anywhere by the young, adolescents, and adult women and men. Although faeces can be used as fertilizer, these are exposed to flies that enter the house and kitchen. Dogs and other animals also feed on faeces. This is not only a threat to the health of the Aetas. The children develop the habit of waste discharge anywhere and such habit is carried on until they are grown-ups and have their own families. This habit is thus passed on. Bathing is also done outdoor where households have water containers. They are exposed to public view when bathing. The children, adolescents and adult women and men also get used to this habit. The teenagers have expressed their concern about security and shame when they have to bathe in open space. Because the Aetas are deprived of toilet and bath, their health is in danger. Moreover, they suffer from lack of cleanliness, and protection of the human body.

Until the year 2020, the indigenous Aetas lacked continuous supply of clean water, electrification and proper human waste disposal, which are all disease risk factors. There are more than 1,000 Aeta families residing at the hills and mountains of Castillejos, Zambales. For their water supply, they fetch from the nearest river where carabaos also bathe. Those who live upland

connect meters of rubber hose from mountain water spring to their home water containers. In both cases, fetching water is unsanitary, time consuming and demanding of physical strength.

Government electrification has not reached the households in most Aeta communities. Thus, the women do their chores, the children study and do all other activities in day light. Night time is dark, unsafe and long for those who are not connected to electricity. This prevents them from engaging in more productive activities and means of livelihood. As they rely more on food gathering in the mountains, this cannot be done in the darkness of night and their mobility is limited.

Limited Chance for Community-Centered Economic Inclusion: A number of barriers are experienced by indigenous Aeta women. Geographical location, for one, disconnects them from the town center where most non-Aetas are located. They have to travel via *kulong kulong* for more than one hour to Sitio Lahar where vegetables and fruits can be purchased cheaper at wholesale and then then they travel another one hour to get to the town market to sell their goods. They spend on gasoline going back and forth for this buy-and-sell business. Economic segregation is evident in labor, where in construction projects, small or big, the Aetas are limited to digging soil and mixing cement since they lack the skills needed for masonry and do not have the needed tools.

As for the indigenous Aeta women, their skills are limited to child-care, home management, planting, harvesting, and selling of crops. A few women are tapped by non-Aetas for domestic work, laundry or grass clearing. Selling their crops is their main source of livelihood. To do this, the Aeta women go to the market with their little children as early as 1:00 a.m., to secure a small selling space on the floor. The non-Aetas rent stalls in the market but the Aetas who are allowed to sell their goods only on assigned days three times a week have their goods spread on the market floor where they stay until noontime. If unable to sell all of their goods, they sell these at cheap price to retailers. Unsold goods are brought home to sell the next day. Unfortunately, selling of cooked food is not an option for the Aetas because the non-Aetas would rather buy cooked food from the stalls operated by non-Aetas.

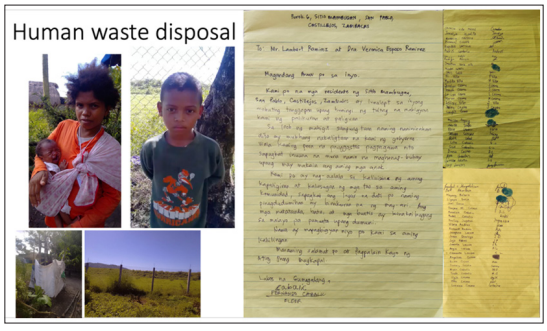

Figure 3: Aeta people's request for Toilets and Baths. October 2022.

Collaborative Work that Alleviates Indigenous Aeta Women's Health

Meaningful and productive life can be achieved through good health. This is the purpose and motivation behind the Esposo-Ramirez Family Social Responsibility Projects (ERZ) and their partners for Aeta development. This family could not be silenced and immobilized by the pandemic and has therefore implemented projects to provide indigenous Aeta women and their families the much-needed water, light and toilets and baths, aside from food and hygiene supplies. Following are the ERZ initiatives and projects for Aeta women and their families which was undertaken in partnership with family friends and generous donors and sponsors.

Strategies for Women's Health

Distribution of Used Goods, Groceries, and Rice

Initially, the 20 poorest Aeta families benefited from the ERZ goods distribution, which started in October 2019 and by June 2022 had reached over 300 families. The monthly distribution occurred on site or at the Esposo residence at the town proper. During the pandemic, there was strict observance of the pandemic protocols such as handwashing, wearing face masks, alcohol disinfection, and social distancing. The Esposo Ramirez family who has the full trust of the donors, provided rice and groceries worth PhP 500 per month for five or six months, in addition to used clothing, shoes, books, hygiene kit, and many other things for the home. In essence, the family helped these donors help poor indigenous people, and they are happy that their support could reach the Aetas. There were also *Balikbayan* boxes coming from different parts of the Philippines, the United States and Canada, containing things that are useful and go a long way with the Aetas. In December, UA&P organized a Christmas drive, and it was heartwarming to see several boxes of pre-loved goods coming to Zambales for them. Other kind-hearted donors are Julie Munsayac, Marissa Catanghal, Medoy Calma, Catherine Zamora, Regina Dimayuga, Chelet Tantoco, Tippy Benitez, Leni Sunico, and many others. Retired Filipino nurses in the United States, Ernie and Beth Rosas, Chita Romero, Naty Agpalo, Manny De Jesus, and others also sent useful goods or cash for groceries and rice. The family did not have to ask politicians, businessmen, or anyone for donations because these kept coming from friends.

In addition, the Philippine Foodbank Foundation, Inc., founded by UA&P professor Dr. Bernardo Malvar Villegas, occasionally sends food products such as milk, canned goods, noodles as well as toiletries for the Aeta women and their family. The foundation is "driven by the utmost concern on the current plight of hunger and malnutrition of the underprivileged," and was founded on "the concept of seeking donation of 'soon to expire' products from reputable companies for distribution to the marginalized families" [4].

Water Storage System

Thanks to YouTube, Ramirez (2022) found the most appropriate water system for a community in the mountains: sealed drums laid side by side [5]. A 500-meter 1.5 in. hose attached directly to the mountain spring brought water down to the drums located close to the houses. Through Erin, we received funds for this from the Small Change, Better World Program of the University of California, Irvine Blum Center (Blum Center for Poverty Alleviation, n.d.), whose mission is to promote social change and inspire the next generation of leaders to action with research on poverty alleviation [6].

When installation started, there were challenges to overcome, such as negative attitude, envy and political issues. Some Aeras who

did not receive drums attempted to stop the installation. Someone blocked the mountain spring so that the water system could not be connected to the main source. Other Aeta families requested a drum and hose for their exclusive use, but ERZ could not address everybody's issues. We were grateful, though, that the blessings outnumbered the challenges. In March, the water system in Sitio Nilasin was completed as planned Ramirez, 2022 [3].

Feedback was very encouraging. "The water storage system that you installed for us, native Aetas benefits us a lot because we used to fetch water from the mountain spring or from the river for cooking, bathing and other water needs. Now, even passersby drink water and wash their muddy feet from the water storage" (M. Gracela, personal communication, September 24, 2021, translated from Tagalog).

There were projects that responded to the needs for more indigenous Aetas women because it had gained more recognition and support from individuals and groups of donors and sponsors, locally and internationally.

It was a success to bring water from the mountain to Sitio Nilasin. However, the Aetas who live in the lowlands still depended on the river for their water needs, including drinking water. The local government took a long time to install a water system somewhere in Kanaynayan through the local water district. When at last the water system was installed in 2022, the Aetas had to pay for installation and monthly water consumption per cubic meter. It should be noted that the Aetas have no permanent employment and rely on occasional manual labor or selling of mountain crops for subsistence. They cannot afford to pay a monthly water bill. As the population is growing and the summer months badly deprive them of water, the demand for a clean and continuous water supply increases, thus a serious concern.

ERZ attempted to do something to help the Aeta families. A proposal was drafted for Jetmatic hand pump installation in Sitios Bagong Silang, Mambugan, Amianan, and Mawao. After one year, donations were finally received!

The Philippine Nurses Association of America - Metropolitan DC (PNAA-MDC) funded the installation of 20 Jetmatic hand pumps that benefited more than 100 families or 429 individuals. An additional 23 Jetmatic hand pump units came for the Aetas that benefited 76 families or 315 residents, including the community plaza, church, and basketball court. Engineer Donna Matutina suggested that this author respond to Arcadis Consulting, Inc. Local Sparks' call for proposals for its COVID-19 recovery program. "Arcadis is a global design, engineering and management consulting company based in the Zuidas, Amsterdam, Netherlands. It currently operates in excess of 350 offices across forty countries" (D. Matutina, personal communication, September 11, 2021). Local Sparks of Arcadis organized a COVID-19 recovery program to improve the quality of life for communities affected by the pandemic. The call for proposals was open to all the countries where Arcadis was in operation. It required answers to the questions, "What are the challenges facing your community? Which areas do you think require immediate action and positive change? What can you do to help recovery in your community? What actions can be taken to make it more resilient in the future?" (Matutina, 2021). As of the closing of proposal submissions, the Ramirez and Arcadis team's proposal was voted second to Brazil's bicycle proposal. Surprisingly, on October 30, this author received news that Local Sparks COVID-19 Recovery Program selected and will support her proposal for Clean and Continuous Water Supply for Aeta Indigenous People. Added to this, Cathy Zamora's students donated three more jetmatic hand pumps and in March 2023 and Dr. Lani and Albert gave funds for the replacement of four broken handpumps.

Figure 4: Philippine Nurses Association of America Metropolitan DC Chapter projects: Health Hub and 10 Toilets and Baths completed and turned over on January 30, 2023

The Aeta women and their families were grateful for the gift of water. One of the wrote, "We thank the sponsors of the jetmatic hand pumps, we hope you will not get tired helping the needy. Everyone needs water. We used to fetch water from the few hand pumps in the neighborhood or from the river that is why we are very grateful that we now have our own jetmatic. Now we can bathe, wash clothes and do all things that need water. In the past, we bring our water containers to fill them up in the river. We also take a bath more frequently now. (J. Lacson, personal communication, October 23, 2021, translated from Tagalog). Chieftain Limpio Soria added, "We are grateful for the jetmatic hand pump because now we have water for washing clothes, taking a bath and do all things needing water. (Personal communication, October 23, 2021, translated from Tagalog).

Solar and Electrical Lights

Hundreds of Aeta families do not have access to electricity in their homes. They also trek the mountains when they go to upland farms or *Gasak* (ancestral land) to plant or harvest vegetables that they can sell in the market. The road to Gasak is dark and there, they stay in a wall-less makeshift *nipa* hut with their family for a number of days.

In September 2022, Arcadis Philippines, through the "Lights for a Brighter World Project," donated 20 solar posts for Aeta communities and 260 portable solar lights for the Aeta families who go to swidden farm (*gasak*) to grow vegetable, papaya and banana [7]. These donations addressed the basic needs of water and light, and has certainly improved the lives of hundreds of Aeta families.

Arcadis Consulting, Inc. again granted funds in August 2022, this time, for the installation of 20 solar lamp posts in Aeta compounds with big number of families and distribution of 260 portable solar lights to Aeta families in Maowao, Mambugan, Bagong Silang, Amianan, Papaya, Balenting, Lomboy, Maage-age, Kakillingan, Kamanggahan, Training Ctr./Sementeryo, Nilasin, Lahar and Alusiis. This adds to the donation of 19 portable solar lights from the PNA-MDC for the residents of Balenting. Having portable solar lights brightened up the Aeta huts, and what's more—the children can already study at night and families are safe from danger in the dark. The lamp posts are located amidst the Aeta houses so they can now gather for evening chats or play native games. Going home at night is also safer.

Electrification was provided for 10 poorest families by tapping the Nationwide Intensification of Household Electrification (NIHE) program of the government. While this program provided the concrete post, cable wires and electric connection, the Esposo Ramirez family had to look for sponsor for the house interior electrification. Luckily, Ernie and Beth Rosas, retired nurses in the US, provided the funds needed.

Toilets and Baths, and Health Hub: People still cannot believe that Filipino nurses in America who are already comfortable in life actually funded the construction of 10 Toilets and Baths and a Health Hub for the Aetas they have never met in a place they have never been! The Philippine Nurses Association of America-Metropolitan DC Chapter lovingly responded to the basic human needs of the Aeta families: five 3x3 meter Toilets and Baths for male and female, each one with hand pump and solar lights were constructed for their use. And because the sponsors are nurses who are always concerned about people's health, a Health Hub (5x8 meters) was also constructed in the Aeta community! PNAA-MDC also provides non-prescription medicines and prescription medicines with Doctor's diagnosis and prescription as needed. In the Health HUB, a marker reads, "*Sa panahon ng* COVID-19 *pandemya, naranasan ng mga kapatid na katutubong Aeta and pangangalaga ng* Philippine Nurses Association of Metropolitan DC, USA." Each area where the T&B is located has an area leader appointed by the Area residents for maintenance and cleanliness. The users, particularly the children, were taught how to use the toilet and the adolescents were instructed from now on to bathe inside the T&B.

Figure 5: Indigenous Aeta women and their families in the Health Hub

In these construction and installation projects, some male Aetas were paid for labor and the women also earned for meals preparation.

Beyond basic human needs, physical comfort, and good health, the nurses have become partners in community development and the promotion of human dignity through their generous support. Indeed, to recognize the human dignity of indigenous people through sincere commitment is a noble act! Aquinas teaches us, "Human persons are imprinted with free will and a fundamental capability to express generosity of spirit, kindness and compassion which they can know and develop through their intellectual being." Nurses distinctly possess these attributes. In fact, respect for human dignity and person-centered care are deeply rooted in the nursing practice.

As for the Health Hub, pre-natal consultation, vaccination, and vital signs check can be done. Ms. Melanie Gonzales and other workers in the Barangay San Pablo Health Center go to the Health Hub once a week for consultations on common illnesses of the Aetas such as cold, flu, cough, fever, diarrhea, skin disease, wound infection, sore throat, headache, stomach ache and allergies.

Referral to doctors are given to those who contracted conjunctivitis, urinary tract infection and anemia. Occasionally on Saturdays, Learning Sessions are held on health topics such as personal hygiene, teen-age pregnancy, symptoms and causes of infectious diseases, diarrhea, and first aid for sprain, burn, high blood pressure, dog bite, snake bite, and dengue. Aeta leader Irwyna Cosme is also available for physical therapy and acts as the custodian of the Health Hub. Needless to say, medical missions for Aetas may be held in the Health Hub. An Aeta elderly woman remarked, *"Ramdam na ramdam namin na niyakap kami ng mga sponsor natin!"* (We really felt that our sponsors embraced us [with their great deeds]). PNA-MDC President Carol Robles responded, "It's so heartwarming to

see the smiles on the Aetas' faces, and we felt their sincere gratefulness. The tribal prayer and welcome dances were so special. It feels good that we have done something to address health equity and promote a healthy Aetas community."

Trainings for Cookery, Hair and Nail Care, and Health Emergencies: Most of the Aetas in Castillejos are unschooled, only few have formal education in the lower grade levels. They end up having a family at a young age and then struggle through life with no education nor skill to earn a living for their family. To address this condition, the ERZ conducted a variety of capability-building projects.

Figure 6: Prescription medicines funded by Philippine Nurses Association of America -Metropolitan DC Chapter

Cookery. There was also a need to teach mothers how to cook nutritious and affordable food for their children. The common products the Aetas harvest are papaya, sweet potatoes, banana and blossom, *langka*, bamboo shoot, and varieties of root crop. The women sell these raw in the market. These are also what they have for daily meals. There are many ways of cooking their products but they need to be taught. We then collaborated with Dianne and Lourdes to teach them how to cook nutritious and affordable dishes. Aside from cooking, the ladies and mothers were taught cleanliness, they wore face masks and aprons while working. Thanks to our friends Leni S., Nora, Leni DL, Marissa, Medoy and others who gave us pots, pans, and cooking instruments, thanks to Gwen for the stove and gas-which were all useful to the Cookery trainings. Best of all, they brought home their cooked dishes to their families!

Hair and Nail Care. Manang Flor was another collaborator who willingly accepted our invitation to teach a few Aeta ladies hair and nail care. She accommodated them in her beauty parlor, made them observe the work and had them try hair cutting. She admitted that it is not easy to cut the kinky hair of Aetas so they needed special training for it. After the training, each one received a set of hair and nail care instruments.

After the training, some of the trainees landed jobs where their Certificate qualified them.

Health Emergencies. We identified the 10 health emergencies that could occur in the mountains. These are snake bite, cut wound, breathing difficulty, collapse, severe stomach pain, severe head injury, fall from high place, cramps, burns, arm fracture. We needed somebody to teach the Aeta women basic things when confronted with such emergencies. We found Melanie, the midwife whose knowledge and skills are not limited to child birth and was willing to conduct the Health Emergency sessions. After a series of health emergency sessions in Nilasin, we also facilitated sessions for Aeta women in the lowlands. Each trainee received First Aid Kit, thanks to the PNAA-MDC. We have also acquired a *kulong kulong* (motorbike with sidecar) for use during emergency and other purposes. Susana Vitug expressed gratitude in a letter saying, "It is big help for the Aetas to know what to do in cases of emergencies that happen in the mountains and low lands. We learned what to do in case of snake bite, wound, difficulty in breathing, stomach ache, falling from a high place, cramps, skin burn and others. The First Aid Kit that you gave is important for us (Personal communication, June 11, 2022, translated from Tagalog).

Analysis of Findings

The Aeta women beneficiaries tell stories about how their lives have improved as a result of the interventions, activities, and capability-building initiatives of the ERZ. Using anecdotal evidences, the usefulness of the projects was assessed by the ERZ together with the stakeholders. Results guided the implementation of succeeding projects.

The ERZ, although not as structured in operations, responded to the needs of indigenous Aeta women and their families. As Erickson claimed, not all the variables in community life can be addressed by initiatives toward development [8]. In the case of the Aeta women, cultural factors and the traits inherent to indigenous identity as well as ecological considerations should be taken into account seriously. For one thing, their dialect is Sambal, which is not the same as the language of the ERZ community development enablers.

Through careful consideration of all these factors, in a span of two years, the ERZ projects have expanded from goods distribution to capability trainings, and building of structures badly needed for the health of women and their families. The beneficiaries increased in number. What is common to the Study Center, water storage system, Jetmatic hand pumps, solar lamps, toilets and baths and the Health Hub is that they are all located amidst the residences of the Aetas, who certainly look after their upkeep so that these can be useful for a long time. In all of the ERZ projects, it was made clear to the Aetas that they own the structures, the trainings, and all other donations that they have received. This author emphasized, "If your work is good and durable, it will last a long time, and your children and grandchildren will be able to use it."

Although many of the Aetas belong to different religious groups, some of the mothers wanted to have their children to be as Catholics. Assistance is extended by the ERZ to these families so that they were able to receive the needed sacraments. When the ERZ activities have grown into projects, they were implemented in collaboration with the local government unit, barangay, chieftain, the National Commission on Indigenous Peoples and the Department of Education. Protocols were observed by securing endorsement from relevant offices. Information dissemination was done through social media, podcast, interviews on radio programs simultaneously aired through YouTube, and articles published globally.

Capability building for the Aeta women was accomplished through skills training in sewing, cookery, adult literacy, hair and nail care and health emergencies. The needed tools, workspace, meals, and transportation allowance are provided. The instructors are local residents who understand and respect the Aeta culture, attitudes, and beliefs. They share the same development goals as the ERZ development enablers, donors, and beneficiaries themselves. As the Aetas assisted in the Jetmatic installation, they learned new skills. As the children saw their parents assisted in the construction of the study center and livelihood workshop, they saw the value of hard work and pride in building something for their benefit.

Indigenous Aeta women demonstrate their capabilities in responding to their own and their family's health needs by playing multiple roles as workers and primary care providers. They perform home chores, do planting, harvesting and selling of crops harvested from the mountains or from their backyard. There is heavy reliance on herbal plants in treating their common health problems. However, there are external conditions that affect their health. Government provides free consultation, laboratory tests and hospitalization but not medicines which the Aetas cannot afford to buy. Mosquitos and flies are everywhere, especially at harvest time in the nearby poultry farm, which are among the disease risk factors. There is also strong belief in superstition and folk magic that their herbal medicines can cure. Their traditional health practices are recognized and respected, for which "indigenous women shall have the right to special measures to control, develop and protect" (R.A. 8371).

The barriers to the acceleration of indigenous Aeta women's health awareness are:

a. Lack of Health Awareness. Their heavy reliance on herbal medicine and the cost of medicines are barriers to their access to medication; The indigenous Aeta women and their families should avail of medical facilities and procedures such as antibiotics, x-ray, laboratory tests, surgery, first aid and others that are not present in their community. Birth giving should strictly be done in the hospital to avoid the risks of birth giving.

b. There is little support from government for Aeta women's access to basic services (water, light, sanitation), and education (non-formal, informal)

There are collaborative work can alleviate indigenous Aeta women's health. These are initiated by the ERZ Projects with the support of friends, associations and private entities with commitment to corporate social responsibility or are bent to help in their little or big ways underserved communities like those of the Aetas. The projects include groceries, study center and water storage; water pumps, portable solar and lamp posts; capability building; education of Aeta women; toilets and baths, and a health hub; and information dissemination.

Conclusion and Recommendations

Since the barriers to indigenous Aeta women's health awareness have already been identified, it is recommended that the ERZ projects, which have been turned over to local government be sustained. This can be done, for example, by assigning the operation of the Health Hub to the Rural Health Unit. Aside from free access to consultation, hospitalization and laboratory tests, medication should be provided to the Aeta women and their families. The barangay health workers, together with a doctor and nurse, can better serve the Aeta women health needs in the Health Hub.

This study found that Aetas rely heavily on herbal plants for their health needs. Over the past decades, the use of herbal medicine has increased in more than 80% usage worldwide. The Aeta women can be trained to collaborate in systematic gathering and preservation of herbal plants. This is not only a great contribution to the field of medicine and pharmacy, but can also benefit the Aeta women towards economic inclusion. Further, studies recommend that "Since safety continues to be a major issue with the use of herbal remedies, it becomes imperative, therefore, that relevant regulatory authorities put in place appropriate measures to protect public health by ensuring that all herbal medicines are safe and of suitable quality".

The initial projects of ERZ that provided water, light, sanitation, health and support for education can be strengthened and sustained if the local government unit can formulate the policies and implementing rules and regulations, likewise provide the needed budget.

While 'gender' is mentioned in its Implementing Rules and Regulations of R.A. No. 11223 Universal Health Care Law enacted in 2019, there is no specific program for health protection and security for indigenous people. Towards this goal, a policy should be formulated and implemented systematically.

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