

GESTATIONAL DIABETES MELLITUS (GDM)

Accessing GDM Care in the Philippine Urban Public Health System

MOTHERS SHARE STORIES OF JOURNEYING WITH GDM



Published by
the Institute for Reproductive Health Phils.



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Philippine Urban Public Health System**

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Institute for Reproductive Health Phils.

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Published in the Philippines

Institute for Reproductive Health Phils.

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Accessing GDM Care in the Philippine Urban Public Health System:

Mothers share stories of journeying with **GESTATIONAL DIABETES MELLITUS**



The World Diabetes Foundation (WDF) is privileged to collaborate with the Institute of Reproductive Health, Philippines on the Accessing GDM Care Project.

Our mission as an independent, non-profit foundation is to empower governments, civil society and other non-state actors who strive to prevent and treat diabetes and its complications. Recognizing that gestational diabetes mellitus (GDM) is a prevalent complication caused by hyperglycaemia

in pregnancy (HIP), WDF is supporting projects addressing GDM in countries around the world.

Symptoms are often imperceptible, GDM can cause severe complications – even fatal outcomes – for both mother and child. Therefore, specific measures are required to detect and manage this hidden condition before it creates irreparable damage. Health systems around the world struggle to identify and implement protocols and cut-off values for screening and treating GDM. Health care system actors are not always fully aligned given their individual perspectives on the complication. It is therefore clear that any set of criteria for the diagnosis of GDM proposed will need to evolve from a consensus approach, balancing risks and benefits in particular social, economic, and clinical contexts.

While GDM has been known and addressed in the health care system of the Philippines for long, increased attention to the complication has gained momentum among all concerned actors in recent years. Thanks to the dedication and collaborative spirit of national level expert

associations and local governments and health facilities in Novaliches and Pasig City, the Accessing GDM Care Project has been fortunate to work as a catalyst connecting the dots and resources to create and pilot a screening protocol and clinical pathway.



This book conveys the voices of the human beings behind the protocols and clinical procedures and it stands as a testimony to the fact that together we can create change for the GDM “Nanay”.



WORLD **DIABETES** FOUNDATION

Mads Holst Jensen
Programme Manager, Ph.D.
The World Diabetes Foundation (WDF)

HOPE SPRINGS IN PASIG



The hallelujah moment came when the Institute for Reproductive Health with the World Diabetes Foundation approached Pasig City to take part in a project that would look at the possibility and practicality of implementing a model of GDM care for diabetic mothers. Gestational Diabetes Mellitus is a disease that a lot of medical practitioners know but hardly do anything about. Prior to the implementation of the project, not even 25% of the women who come to the health centers get screened for GDM. Since there are no national health programs that would address the threat of this condition, screening for GDM is often not included in the regular prenatal check-up. While protocols has been developed by specialty societies, this has not been adopted in the public health facilities due to other priorities, as well as the increased, and often prohibitive, cost of care from screening up to the actual management of cases.

To date, quite a bit of both health care providers as well as patients are still unaware of the magnitude of the disease which was previously thought to affect a few, but actually is quite common among pregnant women. It is because of this low level of awareness that the demand for GDM-related services are often non-existent especially in poor areas. Patients are often diagnosed late and necessary medicines, even when available are often not accessed in a timely manner.

The people of Pasig City are very thankful that this project came to fruition. It has shown that a robust program can be done from the grass root level up to the secondary level to address this preventable disease. That while it may entail some cost, preventive measures when started early and followed religiously can translate to bigger savings to the government and gains for both the mother and the baby in terms of lower maternal and neonatal morbidity and mortality.

In a city where hope springs (*umaagos ang pag-asa*), we are fortunate that we are able to be a part of a community who not only dreams but aims to give more for the future of both the diabetic mother and their children.

Congratulations to us all.



Emma Ruth B. Cuevas, MD, MPH

Rural Health Physician, Pasig City
(President, Diabetes Philippines Pasig City)

MESSAGE

Diabetes is a medical condition that is one of the leading causes of illness and death in the country. Previously known to affect the elderly and those with family history, data shows that this medical condition can be seen in all ages regardless of family history.



And now, diabetes in pregnant women seems to be on the rise. Diabetes in pregnancy makes it all the more urgent to diagnose it early and treat it promptly because it directly affects two people - the mother and her unborn child. The good news is that something can be done to help the mother, her child and their family as well.

This book "Gestational Diabetes Mellitus" by the Institute of Reproductive Health takes us on a journey of pregnant mothers, some from the economically challenged sector of society, who were diagnosed with Gestational Diabetes (Diabetes in Pregnancy), how they were diagnosed, their compliance to their consultation and treatment regimen and the favorable outcome of their pregnancy. It is proof that compliance is possible and that all the necessary tests, treatment and change in behavior is simple and within one's reach. All it takes is the willingness of the person affected to avail of it and do it. It is a testament to what partnership between and among organizations (IRH, local and national Health Department, higher care facilities), the client, community and private sector can do to achieve individual and organizational health goals.

The Quezon City Health Department is grateful to IRH for choosing our local government as part of its pilot site, We are honored and humbled that the stories of our clients have become part of this storybook. This is a legacy which pregnant women with diabetes who are having difficulty dealing with the condition can read and say "It is possible to address GDM and experience favorable outcomes!"



ESPERANZA ANITA ESCAÑO-ARIAS, M.D.

City Health Officer

City Health Department, Quezon City

FOREWORD

Every once in a while, a project hits its mark, and rarely, a project goes over its self-imposed targets.

“Accessing GDM Care” is one such rare project.

From its inception, responses from carefully selected partners sparked enthusiasm among the stakeholders. Seemingly, this was a long-overdue initiative.

With no blueprint to follow, the Institute for Reproductive Health kicked up its pioneering experience in integrating focus projects in local health programs. This time addressing Gestational Diabetes Mellitus in two sites: Quezon City and the City of Pasig.

Six facilities were involved: Gulod Health Center and the Novaliches District Hospital, Manggahan Super Health Center and Lying-in Clinic with its two satellite health stations Napico and Karangalan, and the Pasig City General Hospital.

Health workers and professionals from all possible levels were oriented, trained, and honed in the roles they would be taking on, in the clinical pathway for GDM care. This clinical pathway was developed with the health workers themselves in a writeshop after getting



the science of GDM from the country's experts. A rather meticulous reporting system was likewise developed and practiced with each level involved for documenting the whole process and experience. This system proved too meticulous and did not turn out to be as pragmatic as we had wished. The fact is that it is time to digitalize the health service information system.

Reported data is showing a significant increase in the incidence of GDM from its prevalence of 14% from 1993 data to over 25% in recent years. While *"Assessing GDM Care"* was a demonstration project to show how GDM can be integrated in the public health system, it has also shown that educating pregnant women and involving their families lead to compliant patient behavior.

Another wonderful insight worth sharing is the gratefulness from families once the favorable outcomes are reached. After all, a child's birth is still very much a welcome event even in the direst of circumstances. Add to that the mother's good health after delivery and the picture gets to be one with even more reason to celebrate. In truth, though, getting the mothers to come for the post-partum OGTT six weeks after delivery was a difficult one to achieve.

So now, we come to the final phase of the project. With regret, as one doctor commented during the workshop, all projects without long term funding ends and everything is left in the air. True to his comment, he did leave and never came back.

But to prove that even short-term initiatives have their worth, the partner LGUs have taken on initiatives for GDM care as their own. In one site, GDM orientation was given to all midwives and nutritionists, risk assessment was decided to be done in all health centers, GDM cases are incorporated in their reports. In another site, GDM supplies are now part of the local budget. Moreover, the hospitals waived their service fees for OGTT as the solutions were provided by the project. Labs with minimal costs for the testing have been identified in both sites. And our doubting Doctor has shared his dream of a Diabetes center in public hospitals. Watch the post-Project video for his testimony:



<https://drive.google.com/file/d/1wpl4G-J8rW6xQwdOVpYdMVf0oOFjGMor/view?usp=sharing>



Accessing GDM Care Project

To meet a DOH recommendation, a Cost Benefit Analysis was done for further impetus to mainstreaming GDM care in the health services. Data review on the steps for screening, management, and treatment of GDM in a public hospital setting viz maternal and neo-natal outcomes is ongoing. Professional medical societies concerned with GDM have aligned on the values for GDM diagnosis. There is so much more that needs to be done on a higher level of care, but the seeds have been planted. It is critical now to save the gains we have made so far.

We at IRH, who have served our catalyst role in the last three years, earnestly hope that our lead doctors in the fields of NCDs and MCH take up the nurturing needed at this point.

We dedicate this booklet of twenty GDM mothers in the project to this end, and welcome the story of a father who only wishes after an unfortunate experience with GDM that he had been part of this endeavor.

We honor the project luminaries and all those who were involved in the project who truly went over the call of duty in the service of GDM care.



ATTY. MILTON V. MENDOZA

Chair, IRH/P



Madeleine da Rosas-Valera, MD

MPH Heidelberg



INTRODUCTION

The Accessing GDM Care Project -- a pioneering effort in the Philippine healthcare system -- designed a repertoire of practices that GDM mothers needed to follow to manage their condition in two study areas in Metro Manila: Barangay Gulod in Novaliches and Pasig City. We compiled twenty stories of mothers who participated in the project and journeyed with gestational diabetes mellitus (GDM) during their pregnancy to childbirth.



Women from these two urban areas were generally in their 30's, stay-at-home mothers and belonging to the lower middle income class. Except for one case, all mothers had several pregnancies before joining the project. Not one had ever been tested for GDM even though some had family histories of diabetes.

These stories captivate our attention -- health workers, community workers and mothers themselves. Researchers say that something happens in the brain when stories are read, heard or told. Stories allow us better remember and retain information much more deeply and longer than just being presented facts and figures. When healthcare workers tell mothers that diabetic diet is good for them, wouldn't they take it more seriously when told of a mother who lost her baby to GDM because she did not follow advice as in the story of Ronnielyn on page 49? Or, wouldn't a mother be more easily convinced to follow advice when she hears of the story of Joan de la Rosa on page 30 who lost her baby due to GDM?

Moreover, these stories affirm that, if followed faithfully, the GDM care protocol was effective in managing the condition. There are "flashes of insight" that could be used as teaching tools or improve ways to make information on GDM much more readily digestible by patients and lead them to the appropriate behavioral change leading to the health of two lives: the mother and her unborn.

Mitos Rivera, IRH
Exec. Dir./GDM
Project Manager





BARANGAY GULOD MOTHERS

Stories of happy
outcomes

Fear factor for behavioral change

This case confirms that fear can be a motivator for behavioral change. **Ruth Atis** feared about what high blood sugar level could do to her pregnancy and baby. She listened to advice of the team at the Accessing GDM Care Project. Well, not all of their instructions. She violated the policy of delivering at a hospital just for convenience.



Before she was under the care of GDM Project team, Ruth indulged in sweets and ate a lot, rice especially. Like many unsuspecting pregnant women, she believed that she needed to eat for two: herself and her baby. She felt hungry most of the time. In this fourth pregnancy, she didn't think it to be any different from her past three successful pregnancies. She continued the lifestyle she was used to when pregnant. But on her fifth month, she collapsed due to low blood pressure. When she came to, she stroked her belly, much concerned about what effect this episode would do to her unborn.

She was brought to Barangay Gulod Health Center. The midwife assessed her as high risk for GDM at thirty-nine years old and advised her to go to the Novaliches District Hospital (NDH) to undergo an OGTT.

She had elevated blood sugar level. Then, it dawned on her what had happened to her earlier. She became afraid. *"Natakot ako kasi tumaas ang sugar ko pero bumagsak ang BP ko. Mabigat ang pakiramdam ko noon. (I was frightened because my [blood] sugar level spiked but my blood pressure dropped. I felt really sick then)."*

"To use fear successfully as a motivator, a solution must be offered with it. A new path to follow."¹ The GDM Project team allayed Ruth's fear and offered her a pathway to good health for herself and her baby. For the first two weeks after the first consultation with the nutritionist at the health center, she was not able to comply with the prescribed diet, sometimes eating more than allowed. *"Nabibitin ako sa pagkain kaya may oras na nandadaya ako. (There were times I cheated, eating more than I should because I feel I needed to eat more)."* During those times she "cheated," she recorded that her blood sugar levels rose. When these occurred, she was overcome with fear again which forced her to follow the dietary requirements more strictly.

Then, she observed that her blood sugar would normalize. She became convinced that she should continue this discipline throughout.

On her eighth month, she just wanted to stay home, deciding to miss a scheduled prenatal appointment at the NDH. However, the hospital turned her down when she went in for another day. She went instead to a lying-in clinic nearby for her pre-natal checkup where she was tested to have normal blood sugar level but her blood pressure was high. While months before, she had low blood pressure, this time, she had high blood pressure that concerned her so much. She feared this might affect her childbirth.

The GDM Project's policy of childbirth at the hospital was for the best interest of the mother and child. In case of complications, there are doctors that can readily address them. Ruth understood this well. She chose to go against the policy, finding it more convenient to go to the lying-in clinic. However, Ruth would undergo some childbirth crisis while at the facility.

¹ WILSON, R. (2009, SEPTEMBER 23) THE MOST POWERFUL MOTIVATOR [WEB LOG POST]. RETRIEVED FROM [HTTPS://WWW.PSYCHOLOGYTODAY.COM/US/BLOG/THE-MAIN-INGREDIENT/200909/THE-MOST-POWERFUL-MOTIVATOR](https://www.psychologytoday.com/us/blog/the-main-ingredient/200909/the-most-powerful-motivator)

She went to the clinic when it was her due date. She was already on labor for eight hours but her cervix didn't dilate properly. The attending midwife injected her with medication to induce labor. Her childbirth was further complicated when it was found out that her unborn had fever. Ruth nevertheless delivered to what would be discovered as post term baby. Mother and baby were injected with antibiotics to treat infection that they contracted in this childbirth episode. When health workers followed her up after giving birth, Ruth had not undergone postpartum OGTT as part of the project protocol because there was nobody to take care of her newborn. She was just content with delivering a healthy baby, having overcome her fears of a worrisome childbirth.

“

Like many unsuspecting pregnant women, she believed that she needed to eat for two: herself and her baby.

”

Husband as faithful ally in lifestyle change



A strong family support is critical to a pregnant woman's consent and compliance to medical advice with the husband's role being most crucial.

Paula Mae Delfin was fortunate that her husband acted as her caretaker providing emotional and moral support to her battle with GDM on her fourth pregnancy so that she would not have miscarriages like she had in the past.

Paula gave birth to her first child without complications. She and husband wanted another child in 2017 but had a miscarriage. They tried again in 2018 but, sadly, she miscarried the second time. The couple really wanted to have another child; the only child wanted a playmate! And Paula became pregnant the fourth time. This time, the couple decided to seek help from the health center to ensure that this pregnancy would be successful.

When she went to the barangay health center for a pre-natal checkup, the attending midwife already considered her high risk for GDM due to her health history and sent her to the Novaliches District Hospital (NDH) to undergo an OGTT. Unfortunately, the OGTT machine broke down that day Paula went to the hospital. For want of a successful pregnancy, she went to a private provider. OGTT result showed she had high level of blood sugar. She had GDM. Then it came to her that

perhaps she had diabetes when she miscarried twice. After all, the disease ran in her family. She committed do something about this. She didn't want another heartbreaking miscarriage.

Paula became a beneficiary of the Accessing GDM Care Project. The team educated Paula and her husband on GDM and led them through the protocol. The husband, understanding fully well the implications of the condition, was at the forefront in efforts to manage his wife's blood sugar and to lead a healthy lifestyle as prescribed by the project team.

Like other GDM patients, Paula found it challenging to subscribe to the diet and monitoring plans. She was stressed during the first days but her husband encouraged her on. Sometimes she forgot to monitor her blood sugar on schedule which was to done four times a day. *"Palagi akong gutom. Ang daming bawal! Mahirap yung diet. Mabuti na lang palagi akong pinaalalahanan ng mister ko. (I was always hungry. So many prohibitions! The diet is difficult. It was good my husband was always reminding me [about dieting and monitoring])."* She took to eating boiled egg without the yolk or saba banana for her hunger pangs at night.

Though her blood sugar level normalized after the first two-week dieting period, she experienced having chest pains. The center obstetrician advised her to keep away from eating fatty foods. The husband noted this and ensured that Paula ate the right kind and amount of food.

After all, he was the one doing the marketing.

The wife-husband efforts at compliance to project protocol yielded positive outcomes. Paula successfully gave birth to her baby full term. Though she almost suffered post-eclampsia because of her blood pressure, it was overcome with prescription medication and rest. Most importantly, her postpartum OGTT cleared her for diabetes. It was a happy moment for the family, thanking the GDM Project team for the successful outcomes. ♦

Accessing GDM Care Project: Affordable help for poor mothers

Liezel Villanueva and family rented a small space in a poor community in Barangay Gulod. She gave birth normally to her eldest child seven years ago. She carried her second child to full term but lost her because of complications arising from the umbilical cord being wrapped around the baby's neck. To understand this, we quote from an article at the *Medical News Today*, "nuchal cords disrupt the flow of oxygenated blood to the baby ...In particularly severe cases, nuchal cords can even cause fetal death."²



When she got pregnant for her third child, memories of tragically losing her second baby came back to her. This time, she promised herself that she will ensure this baby would be safe and healthy. "*Lahat gagawin ko para sa anak ko (I will do everything for my baby).*" She would go for medical help, if needed. She had pre-natal check up on the fifth month of her pregnancy at Gulod Barangay Health Center and was assessed to be at high risk for GDM because of her age at more than thirty-five years. The attending midwife for the Accessing GDM Care Project advised her to go for an OGTT at the Novaliches District Hospital. When OGTT result came out, her blood sugar level

² BARHUM, L. (2017, OCTOBER 20), EVERYTHING YOU NEED TO KNOW ABOUT NUCHAL CHORD. *MEDICAL NEWS TODAY*.
RETRIEVED FROM [HTTPS://WWW.MEDICALNEWSTODAY.COM/ARTICLES/319762](https://www.medicalnewstoday.com/articles/319762).

was normal. She was relieved and happy because she was educated on GDM and felt that the baby would be safe at childbirth since she had no GDM.

She went about her life normally, giving in to cravings, such “*minatamis na saging na saba (sweetened saba bananas)*.” As part of the GDM Project, she had to visit the NDH monthly.

On her sixth month, she underwent an OGTT for the second time at the hospital. This time, test result showed that she had a high blood sugar level.

With this finding, Liezel underwent the GDM Project protocol. She dutifully followed instructions such as the right kind and amount of food, simple exercises, and home monitoring of blood sugar. For the first two weeks, she observed that her blood sugar level sometimes spiked but was normal most of the time. Moreover, she regularly consulted the center’s midwife to interpret glucometer readings she wrote in her project notebook. She believed the GDM Project was an opportunity for her to achieve her desire to be well for her baby.

Childbirth was not easy for her. She had to go through caesarian operation. She had long hours of labor with blood oozing out of her uterus that was exacerbated by her baby’s umbilical cord coming out first – a pregnancy complication called umbilical cord prolapse which can obstruct the flow of blood and oxygen when the baby pushes against the cord.³ Because the baby ingested some blood, he had to stay in the hospital for two weeks for antibiotic treatment after which he had grown to be a healthy toddler. For Liezel’s postpartum OGTT, it turned out negative and she was cleared for diabetes.

The GDM Project taught Liezel the importance of accessing medical help during pregnancy. She realized that there were affordable health services in the public health system as she experienced in the project, committing to manage the family’s meager finances so that there would be resources available in addressing health needs of the family. ♦

³ _____ UMBILICAL CORD COMING OUT BEFORE BABY DURING DELIVERY - HOW PROLAPSE IS TREATED. (2020, MAY 16).
RETRIEVED [HTTPS://WWW.HEALTHREFLECT.COM/UMBILICAL-CORD-COMING-OUT-BEFORE-BABY-DURING-DELIVERY-HOW-PROLAPSE-ISTREATED](https://www.healthreflect.com/umbilical-cord-coming-out-before-baby-during-delivery-how-prolapse-istreated).

Healthy lifestyle for the family beyond childbirth



"Salamat po ng marami, napakalaking tulong niyo. (Thank you very much. You have helped a lot)." **Ana Wilma Rivera** gave birth to her second child after ten years. She expressed her appreciation for the Accessing GDM Care Project. *"Ngayon masaya na ako (Now, I am happy)."* She was cleared of diabetes after her postpartum OGTT showed her blood sugar level had returned to normal. *"Itutuloy ko pa rin ang diet para maging malusog ako para sa mga anak ko (I will still continue with the diet for my health and for my children)."*

Months before her childbirth, she went to the Barangay Gulod Health Center for her checkup. The GDM project had started and she became one of its beneficiaries. She was assessed high risk for GDM because diabetes ran in her family. The midwife advised her to undergo OGTT at the Novaliches District Hospital (NDH). As she waited for the results, she pondered whether she really could have GDM since she didn't have it during her first pregnancy. Then, the results came. She had an elevated blood sugar level and diagnosed to have GDM.

Ana Wilma became worried about having the condition. She was reminded of her family's history of diabetes and she didn't want that disease for herself nor for her baby. It was easier then for her to take the steps prescribed by the GDM Project team to manage her health condition on dieting, regular home monitoring of blood sugar and

physical activity. With her husband assisting her, she was able to comply with the diet plan. She was motivated to persevere when she found out that her blood sugar level normalized.

It was a happy event for her family. She gave birth to a healthy baby normally. And, she was cleared of diabetes thereafter. Thinking she might get sick again, she planned to undergo an executive check-up to find out if she was free of other illnesses. Having managed GDM well through the project, she committed to continue what she had learned for the welfare of her whole family.

“

*She was reminded of her family's
history of diabetes and she
didn't want that condition for
herself nor for her baby.*

”



Motivated by diabetes scare

Rosanna Binban was surprised at the midwife telling her she had GDM after OGTT results showed she had elevated blood sugar level. She was thirty-two and on her third pregnancy. *“Nagulat ako kasi wala kaming lahi na may diabetes. Natakot ako na baka magtuluy-tuloy (I was shocked because diabetes did not run in the family. I got scared that I might just have it all the way).”* She listened intently as the midwife warned her of the possible complications of the disease to her and the baby’s. She committed to do something about her elevated blood sugar.

Earlier, she contracted urinary tract infection. She had her urinalysis and was found to have high blood sugar level. At the Barangay Gulod Health Center, she consulted with the midwife about this and was immediately referred to the Novaliches District Hospital (NDH) to undergo OGTT. The result confirmed that her blood sugar level was beyond normal.

Rosanna became a beneficiary of the Accessing GDM Care Project. She went through the protocol, being advised by the team on dieting, blood sugar monitoring at home and some physical activity appropriate to her condition. As with other pregnant women, dieting was a big concern. Nevertheless, she adhered to the instructions. Two weeks after being fully initiated into the project, her blood sugar level normalized without taking any medication.

Rosanna continued with the lifestyle she had learned, including regular pre-natal checkups at the NDH up to one week before childbirth. She was not disappointed that she went through certain inconveniences and sacrifices, especially in controlling her food intake. She had delivered normally though undergoing labor for seven hours. She and baby were healthy so they stayed in the hospital for only three days.

She underwent postpartum OGTT which showed her blood sugar level was high. She would learn this from the center midwife who called her about this since she could not get it herself as she was breastfeeding and tending to her baby. She admitted giving in to food cravings she was prohibited when she was pregnant. For fear of developing full blown diabetes, she committed to continue the disciplines she learned from the GDM Project.

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*She went through the protocol,
being advised by the team
on dieting, blood sugar
monitoring at home and some
physical activity appropriate to
her condition.*

”

Insulin-free GDM Management



A pregnant woman who may have GDM can successfully manage it and achieve normal blood sugar levels without being prescribed insulin treatment if she keeps her weight within a healthy range, does regular and moderate physical activity, and follows a healthy diet. This was the experience of **Lodymil Gaspang** during her bout with the condition after having complied with the protocol of the Accessing GDM Care Project.

After seven years, Lodymil got pregnant for her second child. She claimed not having GDM in her first pregnancy though she had a family history of diabetes. At the Barangay Gulod Health Center, the midwife considered her high risk for the condition and referred her to the Novaliches District Hospital (NDH) to undergo an OGTT. Test result showed that her blood sugar was high. The dietitian at NDH counseled her on the proper diet, regular exercise and monitoring of blood sugar at home. Like many uninstructed pregnant women, Lodymil thought she needed to eat more because she was carrying a baby. Initially she objected to the diet plan but eventually consented to it, being forewarned that she may be prescribed insulin treatment if she ever went against the project team's advice. After the first two-week monitoring period, she had normal blood sugar level without taking any medication. With this development, she decided to comply with

the diet plan including moderate exercising as advised throughout until childbirth.

She had a normal delivery at the hospital though her baby boy had health issues – born with two holes in his heart, was underweight, and had contracted neonatal sepsis -- which were attended to with medical interventions. Though economically disadvantaged, Lodymil accessed services necessary to make her child well and healthy. One year after, the baby had turned out to be an active child though still with holes in his heart which his cardiologist said may heal by themselves over time. Lodymil planned to bring her child for a 2-D echo test to find out if healing had occurred just as the doctor prognosticated.

Lodymil was tested negative for diabetes after childbirth. More importantly, she became conscious of her need to continue what she learned from the GDM project to avoid developing Type 2 diabetes since diabetes ran in her family.

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After the first two-week monitoring period, she had normal blood sugar level without taking any medication.

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Access of care in the public and private health systems

This story combines the experiences of **Christine Sudario** in accessing health care in a government setting and in a private hospital.

She started consulting with the Barangay Gulod Health Center as participant of the Accessing GDM Care Project and completed her pre-natal checkup and childbirth at a private health facility, Bernardino General Hospital.

At the health center, the midwife assessed Christine's risk for GDM. At thirty-five, she was on her fourth pregnancy which was about eleven years after she gave birth to her third child. She was aware that diabetes ran in her family. However, she didn't know if she had it during her first three pregnancies.

Because of risk factors, the midwife referred her to the Novaliches District Hospital (NDH)



for OGTT. The field monitor from the Institute of Reproductive Health went with her to the hospital to assist her. Test results showed that her blood sugar was high.

The GDM Project team guided her through the protocol to manage her condition and have a healthy delivery. The nutritionist advised her to go on a strict diet and to use the glucometer to monitor her blood sugar four times daily. Christine admitted that she encountered difficulty in complying with the restrictions on her diet. She was pregnant and wanted bigger food portions. During one of her pre-natal visits to the NDH, she showed the obstetrician (OB) the tally sheet provided by the project on which she wrote results of her blood monitoring.

The OB interpreted the results and informed her that her blood sugar level was very high. Acknowledging the complications of unabated urge to eat more than prescribed, she tried her best to follow the nutritionist's advice, convinced that her baby would be healthier if she did so. Indeed, compliance with the diet plan normalized her blood sugar level during the first two week period.

Her eldest daughter in the US advised Christine to deliver in a private hospital where she and the baby would both be "safer." She acquiesced; her daughter would pay for hospital bills. She had prenatal checkups at the Bernardino General Hospital in Novaliches where she would deliver her baby.

Christine had difficult labor. Her unborn didn't move downwards. She trusted the attending OB together with a hospital aide to push the baby downward during her contractions to assist her have a healthy normal childbirth. She delivered a healthy baby boy. Regarding her GDM, it could not be ascertained whether she was cleared of diabetes since she had not yet taken postpartum OGTT when the health worker from the health center followed her up.

Overall, she attributed her safe childbirth to the GDM Project team that guided her through health during pregnancy and the medical team at the private hospital Bernardino General Hospital in managing her difficult delivery. ♦

GDM risks manifested

Losing a newborn to GDM

There are times when the best efforts do not lead to expectations of the best outcomes. The Accessing GDM Care Project protocol was designed to assist mothers with GDM to experience favorable health outcomes for them and their newborn. But there are just factors that are just beyond the purview of the project to achieve that.

This is the case of **Luciana Quiroy**. She was a beneficiary of the GDM Project. She lost her third child, born prematurely. Her GDM was not controlled despite efforts of the project team to assist her in its management.

In one of the prenatal checkups at the Barangay Gulod Health Center, the midwife assessed Luciana's risk for GDM: Luciana was thirty-seven years old, had a family history of diabetes and experienced blurring of vision and lethargy but never found out if they were due to diabetes. With this information, the midwife advised her to undergo an OGTT at the Novaliches District Hospital (NDH).

When the results came, Luciana had high blood sugar level. She had GDM. She was guided by the project team on how to manage her diabetes. Motivated by her desire to get well, especially for her baby, Luciana faithfully complied with the dietician's instructions on dieting, daily blood sugar monitoring, and managing her sleeping habits. After the first two weeks into the project, her blood sugar level normalized including a reduction of her weight. The team also told her to manage her sleeping hours, attributing her heavier weight to sleeping too much. This buoyed up her confidence and continued with the prescriptions. However, it seemed that she may really had untreated diabetes in the



past that carried through her pregnancy, such that GDM may have become unmanageable despite her efforts to control it.

Luciana was educated that preterm childbirth was a risk of GDM. Thus, she became apprehensive about experiencing labor pains sometime on her eighth month. This prompted her to go to the NDH as part of the protocol. Although the hospital staff told her it was not yet time for childbirth, she delivered normally right there and then. Unfortunately, her baby boy had serious problems: X-rays showed he had undeveloped lungs,⁴ and had a different blood type from his parents.

Luciana and husband had modest means to provide for their children. In this instance, they had the money to pay for services of pediatrician-specialist at the private Bernardino General Hospital, and to pay for blood donors for their newborn son. They hoped that the baby would survive. For seven days, he was in the neonatal intensive care unit where he was put on a respirator and received blood transfusion. Luciana, in the meantime, pumped her own breast milk to be fed to the baby. Despite all efforts the baby died.

When she learned about the death of her son, Luciana was so devastated she had postpartum bleeding that necessitated blood transfusion. She could not be comforted. She tearfully asked the doctors, *"Anong nangyari? (What happened?)"* The pain and grief of losing the baby was too much for her to bear and expressed ruefully, *"Parang ayoko na ulit mag-anak (I feel like I don't want to have another child)."* She also didn't want to undergo postpartum OGTT. Nevertheless, the project team opined that with preterm childbirth, it was more likely she would have diabetes.

Despite this heartbreaking episode, she still appreciated the GDM Project for the knowledge she gained about GDM. *"Baka hindi para siya sa amin ng asawa ko. (Maybe he was not meant for us)."* Moving forward, she expressed her willingness to follow the diet prescribed to her when she was pregnant to control her diabetes and to live healthily for her two daughters. ♦

⁴ "Newborn respiratory distress syndrome (NRDS) happens when a baby's lungs are not fully developed and cannot provide enough oxygen, causing breathing difficulties. It usually affects premature babies. It's also known as infant respiratory distress syndrome, hyaline membrane disease or surfactant deficiency lung disease." Retrieved from <https://www.nhs.uk/conditions/neonatal-respiratory-distress-syndrome>.

Mother succumbs to complications

The Accessing GDM Care Project protocol successfully normalized the high blood sugar level of **Marilyn Escoto** during her pregnancy. Sadly, her blood pressure and cholesterol levels were beyond normal, she had pre-eclampsia complication that caused her death several hours after delivering her preterm baby normally. Though tragic for the mother, this story had a happy ending for her baby.



The midwife at the Barangay Gulod Health Center assessed that Marilyn, who was on her seventh pregnancy, was already high risk for GDM. She was thirty-five years old and had a high level of cholesterol and referred to the Novaliches District Hospital (NDH) to undergo an OGTT.

Marilyn had six children and helped her husband by working as a caretaker of a house in Cavite, south of the National Capital Region. She was away most of the time from her family in Barangay Gulod. When she found out that she had GDM after the OGTT result came out, she was a little distraught for giving up her work in Cavite. She was concerned about the cost of managing the condition.

She went back to the health center and was relieved to find out that she would be a beneficiary of the GDM Project. She would have access to services for free including doctor's consultations and commodities for home monitoring of blood sugar. Marilyn religiously followed the advice and instructions of the project team. For the first two weeks

of her inclusion in the project, her blood sugar level normalized. However, during checkups, the obstetrician noted and informed her of her high blood pressure and high cholesterol level, cautioning her that if these health markers would remain as such, she could develop pre-eclampsia complication.

This, of course, worried Marilyn. *“Anim ang ipinanganak ko na walang problema. Paano ngayon? (I had no problem giving birth to six children. What will I do now?)*, she told her sister, Florida. She went back to the team and was advised on further lifestyle change, such as have more physical activity and eat more healthy food. Despite limited resources, Marilyn tried her best to follow doctor’s advice.

Florida supported her to the utmost during Marilyn’s pregnancy. She and husband were not able to have children of their own so they resorted to adoption. This would be providential for the coming crisis that Marilyn would face up to.

According to Florida, Marilyn experienced labor pains on her seventh month. She went to the NDH but was not admitted, presumably because it was not yet her due date. She proceeded instead to the Bernardino General Hospital (BGH), a private hospital. However, she was not also taken in at BGH though already so much in pain. The hospital staff insisted that she go back to NDH because it would have her complete medical history. Eventually, the NDH admitted her. Doctors gave Marilyn a fifty-fifty chance of surviving her preterm childbirth because of her high blood pressure. She had pre-eclampsia. Florida shouldered the emotional burden of this crisis. She said it was such a heartbreaking scene to see mother with the child the first and the last time. Marilyn died hours after childbirth.

As she watched mother and child together, Florida said she bent down and whispered to Marilyn not to worry about anything because she would take care of the baby. Florida and husband named Marilyn’s child Princess Aliana Marie, their fourth adoptee. ♦

GDM casualty: Foetal death preterm newborn



Undoubtedly, the public health system has undergone much improvements over the years. Services have been made available to the neediest. Yet, it must be admitted that there are still shortages in facilities that weigh in on the successful outcomes for medical needs. **Joan de la Rosa** had recourse to the public healthcare during her pregnancy. She was part of the Accessing GDM Care Project at Barangay Gulod Health Center and at the Novaliches District Hospital (NDH). She trusted doctors and health workers and followed their advice all throughout the project. However, they could not come to her assistance as much as they wanted to when childbirth came for a preterm baby. Hospitals she went to did not have neonatal intensive care units (NICUs) available at the time of her need.

Joan had three children born full term and without complications. This was her fourth pregnancy at more than thirty-five years old. Her married daughter from whom she had one grandchild learned of the GDM project at Barangay Gulod Health Center and asked her to go for a blood sugar test. Barangay health workers were giving information to the community about the project. Joan went and was interviewed at the site by an on-the-job trainee who was doing a survey about diabetes. The midwife found out that she was at high risk for GDM and referred her to the Novaliches District Hospital (NDH) to undergo an OGTT.

Joan's test results showed an elevated blood sugar level. The GDM Project team attended to her and she entrusted the care of her condition to them. However, for the first two weeks of her engagement with the team after being diagnosed of GDM, she was not able to faithfully

comply with dietary prescriptions such that her blood sugar levels were elevated several times. The health worker noted it and referred her to a diabetologist. She did not consult with the specialist because she thought she needed to pay for doctor's fees. Nevertheless, the health worker assigned to her for home visits continued to monitor and to remind her of complications that could arise with GDM during her pregnancy such as having preterm childbirth, among others.

One day, on her eighth month, she already experienced labor pains but decided to remain at home and rest. Late night that day, she went to the comfort room to urinate and saw blood in her urine. Following the instruction by health workers on what to do for any eventuality during her pregnancy, she went to the NDH to seek immediate medical attention. Unfortunately, the hospital didn't have a NICU available that time and so did the East Avenue Medical Center (EAMC). Finally, she was referred and went to the Quezon City General Hospital (QCGH) where doctors found out that the baby she was carrying was already dead.

She had already lost a lot of blood shuttling from one hospital to another. Still, she wanted to deliver her dead baby at the NDH where she was taken care of until her hemoglobin count increased. Looking back at her experience, Joan realized how right the project team was in reminding her of the complications of GDM: preterm baby, possible caesarian operation, mother's risk of continuing to have diabetes. She also thought of possibilities. *"Siguro kung naghintay na lang ako sa NDH para manganak. Naramdaman ko kasi buhay pa ang baby ko ng pumunta ako sa East Avenue. Nagdudugo na kasi ako. Kung nasa NDH lang ako, baka may nagawa pa para nabuhay ang anak ko. (Maybe I should have waited at the NDH to give birth. I felt that she was still alive when I went to East Avenue. I was bleeding already. If I were at NDH, maybe they [doctors] would be able to do something so my baby would survive)."*

Joan underwent a postpartum OGTT, the result of which showed her blood sugar level was still elevated. Still reeling from the loss of her baby, Joan had not yet consulted any health provider about this. However, she committed to the health worker following her up on her case that she would continue to observe the prescriptions of the GDM Project knowing what could eventually happen to her if her diabetes would be left untreated. ♦

PASIG CITY MOTHERS IN THEIR OWN WORDS....

Overcoming GDM
successfully

Self-sacrifice for safe childbirth

By Daisy Dario

A doctor at the Pasig City General Hospital (PCGH) referred me to Dr. Cristy Yao at the same hospital when I was diagnosed with GDM. I was four months pregnant. After Dr. Yao explained what it was about, I was alarmed to know that my baby could die and I, too, could have complications if the condition would not be treated. I was also thinking of my hypertension. *Could this also complicate my pregnancy?* Thankfully, I was able to deliver my healthy baby Shaira normally. I attributed this to the Accessing GDM Care Project team that guided me in managing my GDM. In particular, I would like to mention Dr. Yao who helped me throughout my pregnancy, never failing to remind me to follow the prescribed regimen of the project.

Upon joining the project, the team taught me on how to control my blood sugar levels from being elevated through proper GDM diet, regular exercises and self-monitoring of blood sugar levels at home. I also had twice-a-month checkups at PCGH.

I went through sacrifices and difficulties in following the team's instructions. There were times that I wanted to give up. I found it most challenging to stick to the GDM diet because there were foods that made me feel good to eat but were not allowed. Next difficulty was monitoring my blood sugar levels. I found that pricking my finger with a lancet was becoming more and more painful such that I did not do



as much regular monitoring as advised. On the other hand, I enjoyed having my daily morning walks in the morning and afternoon as part of the exercise regimen. Since I wanted to deliver a healthy baby, I tried my best to adhere to the protocol with the support of my family.

Thank God, I successfully delivered a healthy baby despite experiencing hypertension during childbirth. The GDM Project team helped keep me and my baby safe. They truly showed their concern, offered help and guided me in minimizing the complications of GDM.

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*I was also thinking
of my hypertension.
Could this also
complicate my
pregnancy?*

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The best care for my normal delivery

By Cherry Tumambing

When the obstetrician at the Rizal Medical Center (RMC) told me that my fasting blood sugar was high, the thought of having diabetes immediately crossed my mind. I recalled that my mother died due to complications from diabetes mellitus so I had been conscious of taking care not to have it. So, it came as a surprise when I learned that I had GDM. How could this be? But come to think of it, I wasn't tested for GDM in my first pregnancy. How would I have known I had GDM then?

Anyway, I was three months pregnant when I learned of my condition. The health worker and midwife at the health center asked me to join the Accessing GDM Care Project so I could receive help in overcoming the complications of GDM in my pregnancy. I consented and went through the project protocol.

I knew that the advice and recommendations of the project team would be effective in controlling my GDM because they were coming from doctors, specialists and health workers. But I initially found them difficult to comply with. On the diet plan, meatless meals were such a big sacrifice for me. I loved chocolates too which were not allowed. Regarding blood sugar monitoring, it was a trying routine. Pricking my fingers every day became more and more painful. However, I just had to think of not having complications and having a healthy baby that



I was able to bear whatever pain and inconveniences there were in complying with the project team's advice.

I was fortunate that my husband fully supported me to adhere to the project protocol. He made sure that I stuck to the prescribed diet. He prepared the right kind of food for our meals. He reminded and joined me in my exercise regimen. He also went to the health center to replenish my supplies for monitoring blood sugar levels. He was truly a good husband and an *ulirang ama* (a model father).

I received the best care from the health center and RMC staff that enabled me to avoid complications and have a normal delivery of a healthy baby. They gave me vitamins for my pregnancy, too. After childbirth, I was given postpartum OGTT that showed my blood sugar level was back to normal. I must say that the services of the health center were already comparable to those of private clinics. I hope the GDM Project will continue and be made available to all pregnant women so that they too will have healthy pregnancies and babies.

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After childbirth, I was given postpartum OGTT that showed my blood sugar level was back to normal. I must say that the services of the health center were already comparable to those of private clinics.

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Just obey health care providers!

By Licyl Geronimo

I was tested positive for GDM on my sixth month after taking a laboratory test at Pasig City General Hospital as a participant in the Accessing GDM Care Project. I remember that there were many times I complained of being with the project out of exasperation. *Ano ba yan, ayoko ng magbuntis, and hirap. Ang daming bawal!* (What's this? I don't want to be pregnant again, it's difficult. There are just so many don'ts!) But then, I was taught and advised on the ill effects of GDM for me and my baby which motivated me to go along and to follow the prescriptions and instructions of the health team.



After testing GDM positive, the health worker referred me to the Ms. Jane, a nutritionist at the health center. She was a big help in instructing me on how to control my sugar levels and not go through insulin treatment. She monitored my food intake very closely, making sure that I didn't eat too much so the baby didn't grow too big inside me and to prevent passing on diabetes to my child.

Regarding my diet, my husband was such a big help in making sure I complied with the prescribed plan. He helped me buy vegetables and fruits. He sacrificed drinking soda and instead took to water, especially when we were together. Although I loved sweets so much, I refrained from indulging in them and so did he. It also helped that we did not have foods disallowed for diabetics at home so I did not pine for them.

Ms. Jane taught me how to monitor my blood sugar levels too. She gave me a glucometer, glucometer strips and lancets which I used for that purpose three times daily. This became trying for me to do every day because over time, the lancets caused so much pain, and sometimes, numbing in my fingers. Nevertheless, I did it as instructed.

I needed to exercise too. Ms. Jane suggested that I search online for the video “Sanyutis,” some kind of belly dancing for pregnant women. So, I did. Every morning, I followed the moves for forty five minutes to one hour which served as my daily exercise. This certainly amused my eldest daughter, *“Mama, anong ginagawa mo? (Mama, what are you doing?)”*

Because I followed the advice of the health team, I was successful in delivering a normal baby, Alicia Kate. Her blood sugar levels were normal and didn’t get the diabetes that I had while pregnant. Like my first childbirth, I had caesarian delivery not as complication from GDM but due to my small pelvic area.

My experience made me realize that during pregnancy, it is important to have a healthy lifestyle such having a good diet, doing regular exercise, and even having a hobby. However, dieting should not only for pregnant women who have GDM, but even for those without GDM because they too are at risk of having high blood sugar levels. It is also necessary for pregnant mothers to always go to the health center and follow the advice of health workers. I want to share these realizations with other women so that they can experience the positive results of a healthy lifestyle that I learned and did through the GDM Project.

I owe a lot to the health care providers in the GDM Project: endocrinologist Dr. Yao, nutritionist Jane, OB-GYN Dr. Anne, and health worker Neng. They shared all they knew for my good health and for my baby too. The GDM Project through the health center and the hospital is the best. ♦

Never be alone in GDM care

By Rechie Bermudez

When I was recruited for the Accessing GDM Care Project on my third month of pregnancy, I was not expecting much from it. Looking back, I must say that I don't regret it at all. The services I received were just beyond my expectations.



Ms. Nemia, the midwife at the health center advised me to undergo an OGTT at the Pasig City General Hospital. When the results came the midwife told me I was OGTT positive which I found out to mean that I had GDM. Diabetes? I looked at her, I became nervous and anxious. I didn't expect this result! I thought of the baby inside me. I stroked my belly, thinking *"Would this child be normal?"*

The project team proceeded to instruct me on GDM management: the appropriate diet, the use of glucometer for self-monitoring of blood sugar and exercise. All throughout the project, Ms. Nemia, the nutritionist, was on hand to advise me to follow the instructions of health care providers. *"Hwag matigas ang ulo mo. Para sa iyo ito at sa anak mo. (Don't be hardheaded. This is for your own sake and your baby's)."* She gently reminded me.

For me, the most difficult aspect of being a GDM patient was following the diet plan. I could easily follow the prescribed food and portions if I were eating alone. But eating with my family? That was a big problem. Seeing so much food on the table and not being able to eat as much as they did was agonizing for me. During parties or birthday celebrations,

I was just not allowed to eat as much as I would have liked. I really felt sorry for myself.

One may ask how I was able to embrace the diet discipline. Well, during those few times that I indulged in so much eating, I monitored my blood sugar levels and they registered high. So, I knew it was due to my food intake. From then on, I started to control what I ate. I was also inspired to persevere because my family decided to support me in my dieting.

I eventually delivered a healthy baby! Though I have not yet undertaken postpartum OGTT because I have no one to look after my baby should I go to the hospital, I am hopeful of having normal blood sugar levels.

The project gave me several advantages. The expenses I incurred for sugar monitoring and consultations were lowered; they were easy on the pocket. I learned a lot about my condition which allayed my initial fears of GDM affecting my unborn. Also, it taught me the importance of self-discipline and of the need to consult with doctors and health workers to prevent, control and cure an illness, like diabetes.

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*I was also inspired to persevere
because my family decided to
support me in my dieting.*

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All the family in lifestyle change

By Kathleen Sedante

I went to see a midwife at the health center who told me to have a fasting blood sugar test and undergo an OGTT. When the results came, she referred me to Dr. Cristy Yao at Pasig City General Hospital (PCGH) who told me I had an elevated blood sugar level and had GDM. She explained my condition and how it could lead to high risk pregnancy if left untreated.

I left Dr. Yao's clinic, feeling anxious about being tested positive for GDM. This was my sixth pregnancy and I was concerned about having complications. In the past, I also had high risk pregnancies but I simply went to the hospital for check-up. I gave birth without much difficulty. This time, it could be a different story.

I joined the Accessing GDM Care Project. The team led me to the steps to manage my condition. I learned from the nutritionist about the right diet, the right intake of rice and bread and foods, and foods to avoid. The nurse taught how to monitor my blood sugar level at home. For this purpose, the project gave me access to free glucometer strips as well as being lent a glucometer. I was also advised to do moderate exercises.

My family learned about my condition. I told them the complications if I would not do something about it. They supported me in my efforts to follow the team's advice. They encouraged me to eat fruits and vegetables which they did also. Since I was not allowed sweets and soft drinks, they either reduced or altogether stopped their consumption of such foods. They even stopped selling soft drinks in our sari-sari store so I would not be tempted to take one for myself. My husband joined me in my thirty-minute walks in the morning and in the afternoon. With the family fully cooperating with me, I no longer felt alone in looking after my health and my baby's.

I had delivered full term normally and didn't have complications. My baby was born healthy. I was scared at the start, thinking I might have diabetes even after my pregnancy but my postpartum OGTT results were found to be normal. I am glad there's a GDM Project because the knowledge I gained helped me in avoiding that.

The project was wonderful. I received expert advice and explanations from doctors and health workers all throughout my pregnancy. Health workers monitored if I was complying with the protocol, most especially the monitoring of blood sugar. It also helped me a lot that the cost of services rendered was reduced because of free strips and glucometer which I was allowed to borrow. I believe the GDM Project would benefit babies and mothers, not only during pregnancy, but even beyond childbirth. ♦

Joy and relief: Cleared of diabetes after childbirth

By Karla

I participated in the Access GDM Care Project at the Pasig City General Hospital (PCGH) where I was working as a nurse at the intensive care unit. I was thirteen weeks pregnant. An obstetrician attended to me and asked me to go for an OGTT-75. Test results showed that my blood sugar level was elevated so she referred me to Dr. Cristy Yao at the hospital. I was surprised and scared when she confirmed that I was GDM positive as she proceeded to educate me on its effects on my pregnancy. *What could possibly happen to me and my baby?* I nervously mumbled to myself as I left her office.

When I confided this to my colleagues, I was even more scared! They told me that I could have caesarian operation or worse, pass my diabetes to the baby. But, I didn't let anxiety and fear of GDM overcome my excitement in having a baby. I was just grateful that the condition was detected early on.

After the initial consultations, I met the project team that ushered me into the steps to follow in GDM management. The nutritionist prescribed a diet that I had to follow through my pregnancy. The nurse lent me a glucometer for the daily monitoring of my blood sugar level. As part of the protocol, I went to see the endocrinologist, Dr. Yao, every two weeks for regular check-ups.

I struggled to comply with the diet plan. Pregnancy



made me crave for food. I was always hungry and wanted to eat more often than prescribed. I managed my hunger pangs by eating small servings every three hours. Even then I hankered for food every hour!

It helped that my husband and my mother were aware of my condition and the prescribed diet I had to follow. They bought fruits for me. My mother prepared our food accordingly including the lunch bag I brought with me to work at the hospital. My family's involvement in managing my diet eased my hunger problems.

I continued to see the OB at the hospital for my pre-natal checkups. However, I was already forty one weeks into pregnancy but still did not go into labor. When I checked in the hospital, the attending OB diagnosed my condition and found that my baby's heartbeat was weakening so she had me undergo caesarian delivery. I was so joyful that I delivered a healthy baby girl, Kate Cassandra 'Cassie.' After six weeks, it was such a big relief that I was cleared of diabetes after testing negative for postpartum OGTT.

The GDM Project truly benefited me. I must admit though that in the beginning I hesitated to participate because of more work I would put in while still working as a nurse: monitoring my blood sugar level, following a strict diet plan (which was truly problematic), exercising. However, all that work was really insignificant because of the healthy and favorable outcomes for me and my baby. The project also shouldered the cost of services rendered such as consultations with specialists, laboratory tests and provision of glucometer. Additionally, it taught me to live a healthy lifestyle through proper diet, regular exercise and check-ups. I owe all of these to the project. ♦



NEGATIVE OUTCOMES DESPITE GDM CARE

Journeying with the health team in my first pregnancy

By Zelda Sareno

I am happy I became part of the Accessing GDM Care Project on my first pregnancy. I was tested positive for GDM. Without the help of the project team in managing the condition, my pregnancy and childbirth could have been much worse than it turned out to be.

I was five months pregnant when I underwent OGTT-75. I still remember drinking a sweet liquid that made me want to throw up. Anyway, the midwife at the health center referred me to Dr. Cristy Yao of the Pasig City General Hospital (PCGH). She was the endocrinologist at the hospital and GDM cases were referred to her by the health center.

Dr. Yao explained to me my condition and how it could lead to complications if not treated.

As beneficiary of the project, I had access to various consultations and services for free. The nutritionist prescribed a diabetes diet. I went to see her every Friday during my pregnancy. On the other hand, the nurse at the health center taught me the use of glucometer so I could monitor my blood sugar thrice a day. I was allowed to borrow the device and given access to insulin and laboratory tests.

Of all the prescriptions and advice given, I found complying with the diet the most difficult one. I was irritated being told to go on a diet because I loved eating so much. It was my favorite hobby. *Malakas akong kumain, eh* (I'm a heavy eater)! My family had to monitor me, always keeping watch over the food I ate. My husband often reminded me not to eat more than I should while my sister and mother made me follow the baby book instructions faithfully. Still, I was not always faithful to my diet. I sometimes had more extra rice servings than was prescribed.

I did things that were contrary to the project team's advice for a healthy pregnancy such that I was not able to attain stable and normal blood sugar levels. Because of this, Dr. Yao put me on insulin treatment against my wishes. You see, I hate injections. But, I had to comply with the treatment with my sister administering insulin injections.

Nearing childbirth, I had difficulty breathing though I didn't have asthma. I had to undergo caesarean section and delivered a healthy boy, John Chester, who I call Insulin Boy. Doctors told me that the childbirth episode may have been caused by GDM. Nevertheless, we were all very happy that it turned out well for my baby and me.

However, I still tested positive in my postpartum OGTT even if I had been eating less. I would remember the GDM Project for teaching me the importance of self-discipline in choosing the right food to eat, in having regular exercise, and in following doctor's advice for a healthy pregnancy and childbirth. I am hopeful that I would overcome my diabetes too. ♦

From a GDM mother: Follow the health team

By Ronnielyn Parami

My story should be a lesson to pregnant women. I lost my third baby at childbirth because I didn't follow the advice of doctors and health workers that were part of the Accessing GDM Care Project. I was diagnosed with GDM but didn't listen to them seriously though they constantly reminded me to adhere to the project protocol to lower my blood sugar level. And this is where I had gone wrong. My complacent response to advice was fatal for my baby. It was my fault that the childbirth outcome was heartbreaking.

I was four months pregnant when a health worker confirmed that I had GDM after undergoing an OGTT. I joined the Access GDM Care Project and was given a kit about it. The project team at the health center explained to me how the project could help me manage GDM. Health workers gave me trainings and instructions on the disciplines required by the project – the nurse on the daily monitoring of blood sugar levels, the nutritionist on the proper GDM diet and how to follow it. Regular exercise was also recommended.

But I was indifferent to all of their instructions. I felt they were difficult tasks, especially to comply strictly to the GDM diet. I found restrictions on food difficult to follow. I didn't give much thought to the diet plan, relegating food preparation to my mother. I didn't even have regular exercises. Expectedly, I continued to have high blood pressure and high blood sugar during my pregnancy.

The day of delivery came. My baby died at childbirth. I was at a loss and confused. *What happened?* Then, when I came to my senses, I thought of what I could have done so as not to have lost my baby. *What if I went to the doctor earlier? What if I followed the advice of health workers on diet, exercise and blood sugar monitoring? What if I had listened seriously to health workers who were monitoring me faithfully in this project?*



I regret that I did not consider the project protocol seriously. I was halfhearted in following the instructions of the project team. Nevertheless, I would like to say that I appreciate the free glucometer strips, the glucometer I was allowed to borrow and some free doctor's consultations from the GDM Project. ♦

My age -- and not GDM- - in childbirth crisis

By Marilou Gabat



It was the saddest day of my pregnancy. I was on my eighth month when I gave birth normally to a stillborn baby girl. She would have been my seventh child after having had six successful pregnancies. Despite this episode, I am thankful that I became part of the Accessing GDM Care Project where I experienced receiving very satisfactory services from specialists and health workers at the Pasig City General Hospital (PCGH). I followed faithfully the instructions of the team in managing my GDM but at forty-four, I already had high risk pregnancy. The loss of my baby was not due to GDM, doctors comforted me.

Months before, I had my check-up with Dr. Shelley Ocampo at PCGH. She asked me to undergo an OGTT. When the results came, she said that my blood sugar level was elevated. This came as a big surprise! *Why?* I asked myself. I always had it tested monthly to avoid having the disease. You see, my mother died due to complications from diabetes. Also, I have given birth to six children and never had GDM. But, on second thought, I may have had it in previous pregnancies but never knew about it. Dr. Ocampo referred me to Dr. Cristy Yao, also at PCGH, who would receive referrals of GDM from the hospital and health centers.

As project participant, the team initiated me through the protocol to manage my blood sugar level and control GDM through dieting, monitoring of blood sugar levels at home and regular exercise. I was five months pregnant when Dr. Yao put me on insulin treatment, injections of which I would do in the morning and before dinner.

I didn't have a hard time complying with the prescribed plans. My six children helped me in household chores while I was pregnant. On my own, I began to stick to the diabetes diet. I was also faithful to my insulin treatments.

Then, one day, on the eighth month, I was stroking my belly when I sensed that there was no movement from my baby. I went to the hospital for a check-up. But it was a Sunday so I went back the next day. Upon examination, there was neither fetal heartbeat nor movement just as I had suspected. I was brought to the Emergency Room to have an ultrasound to confirm the findings. Doctors said my baby had an exposed umbilical cord which was a congenital anomaly.

Needless to say, I was shocked and could not stop crying. I was able to deliver my stillborn baby normally. The doctors said that this case had nothing to do with GDM but with my age. Indeed, post-partum OGTT results cleared me of diabetes.

Even if I lost my baby, I value so much the benefits of having joined the GDM Project. I learned to monitor my blood sugar and inject insulin on myself. Financially, it was a big help; I was able to save a lot of money from glucometer strips and insulin which the project provided. I would also be able to apply the knowledge I gained from the project in leading my family toward a healthy lifestyle. Overall, the most significant learning I have is the importance of diet, regular exercise, and blood sugar monitoring for both pregnant women with GDM and for non-pregnant mothers. ♦

Discipline: a must for GDM mothers

By Melodia Marave

One thing I learned from Accessing GDM Care Project was to discipline my eating habits. You see, I had caesarian operation because my unborn was quite big for a normal delivery. It was because of GDM, doctors said. Indeed, I still ate too much when I was pregnant despite being told the contrary.

On the fourth month of my pregnancy, the doctor at the Rosario Health Center (RHC) told me that my blood sugar was elevated and that I had GDM. I was nervous and worried as I listened on how this condition would impact me and my baby's health. Right there, I was asked if I wanted to be a participant of the Accessing GDM Care Project.

I had heard mothers at RHC talk about the project: the seminars, trainings, consultations, devices. These attracted me to join thinking it could help me with the expenses in looking after my health. But I still wondered what it had in store for me. *Could it really help me in my condition? Will I be able to follow the advice of the team? What will happen if I could not?*



Even with those questions in mind, I consented to participate. A health worker showed me the steps to follow. She referred me to the center's nutritionist who explained the proper GDM diet. Then, the RHC nurse trained me to use the glucometer in monitoring my blood glucose three times a day.

I had difficulty in following the team's advice, most especially in dieting. I loved to eat and was always hungry! It seemed like I could not do anything about it. But even my husband was seriously committed to help me adhere to the prescribed diet. Yet, I still was not able to control myself completely. This would be a costly one at childbirth. I had caesarian section.

My advice to mothers, then, is not to be afraid of being GDM positive but it is necessary for them to comply with the advice of doctors and health workers if they want to avoid the complications I experienced.

“

– “ I had heard mothers at RHC talk about the project: the seminars, trainings, consultations, devices. These attracted me to join

”

A FATHER'S STORY TO LEARN FROM

Family history and paternal education in GDM Treatment

Parenting is an exciting yet a daunting task for young parents. The gift of a new life in the family is a momentous event that enlivens family members to celebrate and be grateful for. A father of two boys, the coming of a third baby is filled with expectation and fulfillment to complete an ideal family. We were expecting then of a baby girl who will complement her kuyas, a reflection of Filipino culture of balance and complementarity. The two boys were born on a normal delivery in a public hospital in Sampaloc, Manila.

But the excitement of waiting for the third baby turned out to be an experience of stress, despair and sadness. During the early months of her pregnancy, my wife Liza was referred to a dietician due to high blood sugar. On her seventh month, her ob-gyne told her that she has gestational diabetes mellitus (GDM), a health condition of a pregnant mother that needs to be given serious attention. I was not even aware of this condition except the fact that my wife needs to reduce her sugar. It was only after her monthly consultation that my wife informs me about this GDM with little education about its consequences to the health of the baby and the mother. Nor I was given any information about the risk factors about pregnancy and diabetes. So I just hope that her pregnancy will turn out to be normal by attending to her needs and medication.

It was Friday morning when this ordeal began. My wife started to complain of labor pains, "Dalhin mo na ako sa ospital, di ko na kaya." I rushed immediately to the nearest hospital and called her doctor. I brought all the things she needs for her delivery only to be advised by her ob-gyne that it was not yet her time. So went home waiting for the due time. It was Monday the following week when she complained that she cannot bear anymore the pain so I called her doctor and advised me to bring me to another hospital. With hours of waiting at the hospital lobby, I started to be nervous and prayed for my wife and her baby. Then, her doctor came out, called

me and explained the situation at the delivery room. I found myself speechless when she announced that the heartbeat of the baby is erratic and fluctuating. After signing the informed consent, the doctor performed the caesarian operation. After several hours, the doctor came out and informed that the operation was successful but narrated the complication of the delivery. I became more nervous when she disclosed that my baby's situation was her first case. When the baby came out, there was no seizure and did not even cry. I started dropping my composure after learning the condition of my baby and with my wife left unconscious at the operating room. I started to be shaken, not knowing what to do with the next step. While kneeling at the hospital's chapel, I heard my name to proceed to the emergency room. The doctor instructed me that they have to transfer the baby to another hospital due to lack of equipment. I just found myself cuddling my baby inside an ambulance while being transferred to another hospital. At the hospital, the baby was admitted at the neonatal intensive care



unit where he was given life-support systems. It is heart-breaking to see him with all these apparatuses connected in his arms, legs and head. I do not know when this ordeal ends thinking of my wife left in a hospital and my baby at the NICU.

After a series of tests and consultation regarding the baby's heart and brain, I was given the impression that he has a very slim chance of survival. If he survives, it is a vegetative existence. After five days at the NICU, I asked the resident pastor to baptize my baby. I gathered all my relatives, sought their wisdom and communicate the decision to remove the apparatuses to my wife who is recuperating at the other hospital. This was the heaviest decision that I ever made in my entire life – signing the Discharge Against Medical Advice (DAMA) form. With a heavy heart, I asked my sister to do the procedure of removing the equipment on my baby's. At the chapel, I thanked God for giving this life, though short, yet I still experience His grace by sparing her mother.

A month after his burial, we went back to her doctor for check-up. The doctor was silent about what happened. I didn't even hear any consolation from her which catalyzed my pain and asked her the question: What really happened? Her brief answer doesn't even satisfy my dilemma. I was waiting for her to explain if there is a connection between my wife's pregnancy and her blood sugar. She just retorted the established fact that it is risky for pregnant mother if they have diabetes. I was asking for more questions and engage in dialogue but her schedule prevented us from doing so.

The succeeding months were intensive education for me. I started to ask second opinions from my colleagues in the medical profession. My wife shared her story to other mothers in our marriage encounter group for healing and acceptance. I asked friends who have the same birth narratives. I gathered some thoughts and share this to the family.

1. Importance of family history. Disease is in the genes, they say. My wife has a family history of diabetes. She should bring this out during pregnancy for maximum care and management. HEALTH PROFESSIONALS need to consider their history as to the importance of pregnancy planning to ensure optimal blood sugar control and diabetes management at conception and throughout pregnancy.

2. Monthly consultation during pregnancy should include the husband to be informed and educated in order to avoid major maternal and fetal complications.
3. GDM increased the risk of birth injury to my wife and baby. That was the reason why she was advised to reduce weight and take medication during pregnancy.
4. Earnest dialogue and conversation during the pre-conception period. Mothers with diabetes should include, as part of health care, the need for assessment and treatment of any complications of diabetes prior to conception and during pregnancy.

ACCESSING GDM CARE: A MUST FOR ALL PREGNANT WOMEN TO
BE ASSESSED FOR RISK FACTORS,
BE DIAGNOSED EARLY,
BE GIVEN EDUCATION ABOUT THE
POSSIBLE CONSEQUENCES.
BE MONITORED AND TREATED AS
NEEDED.

*Needless to say, this initiative will definitely save lives, Since both
mother and baby are at risk.*

RONEL P. DELA CRUZ, PHD

Director

Center for Social Innovation & Research

SPUQC



GDM PROJECT LUMINARIES

Gulod Health Center

NELLY GORDO – One of a kind!

One of the highlights of this project was the amazing performance of certain individuals working in quite challenging circumstances. A health center serving a depressed urban community is, after all, not a too ideal setting to start with.

RM Nelly Gordo is one such individual.

While she found the project unappealing when she first heard about it, uppermost in her mind was additional work, *'dagdag trabaho ito!'* to her already swamped workday at the Center.

Upon her active participation in the GDM training together with all other health workers in the different levels in public health, including doctors and specialists, she found a difference in the project approach.

It was this co-mingling with hospital personnel and other medical professionals with whom they would be closely partnering at ground level which sparked her initial interest. Throughout the project, in the next three years, these interactions would deepen and broaden her knowledge in GDM through regular meetings and discussions. Barriers were addressed as they cropped up, solutions jointly sought and implemented.

Sure, Nelly can be strict and fearsome, in dealing with the patients especially with regard to non-compliant behavior. Basically, the risk assessment for GDM and keeping the additional records fell on her shoulders. Not an easy task! Communication with the District hospital was one benefit that Nelly pointed out. She is very well aware of the



financial difficulties of the women they serve at the center. In this way, Accessing GDM Care was always dependable for supplies and resources. Most of the women had never heard of GDM, including many health workers.

She has this to say, “It was a privilege for me to be part of the GDM project with IRH. I pray the project expands to the whole City for the benefit of the pregnant women and their babies.”

Nelly, on the other hand, can be irrepressibly funny. And her sense of humor (when you catch her at the right time as you see in her attached picture) soothes any harshness you may have thought was there in her manner of dealing with people in general.

The GDM mothers interviewed were all of one accord in this realization: “The health center cares for me and my baby!” A more ideal representation of the public health servant could not be asked for.

Thank you Nelly for all your hard work, be blessed!

“

‘ . . .when she first heard about it, uppermost in her mind was additional work, ‘dagdag trabaho’.But then It was this co-mingling with hospital personnel and other medical professionals with whom they would be closely partnering at ground level which sparked her initial interest.

”

PUSH AND PULL: They matter much in GDM Diagnosis and Treatment

Grace Oballes is a jolly mother of five who lives in Barangay Gulod, Novaliches, Quezon City which is one of the sites of the Accessing GDM Care Project. She was being trained as a Barangay Health Worker in the Barangay Health Center of Gulod when she was discovered by IRH as a good candidate for the post of Field monitor in the same barangay. Grace was confidently referred for the post by the then Barangay Kagawad for Health. Grace says this was one factor that made her give her best!



She described her first perception of the project as too confusing. She did not feel confident that she would learn the ropes of encouraging the pregnant women to come to the health center. It was actually the first time she heard about GDM. Would they come for the GDM diagnosis and management of GDM should they be found with higher than normal sugar levels?

All her confusion about the procedures to follow were eased by the training/workshop she participated in from the Institute for Reproductive Health. Together with all other health workers who were to be involved in the project, she learned the most basic things about the condition of women with Gestational Diabetes Mellitus from the country's top specialists:

- why it is extremely important for pregnant women to get diagnosed

- the process of diagnosis and management
- the Clinical Pathway to be followed in the project.

Although she learned the flow of diagnosis and treatment from the Clinical Pathway of the project, Grace still found it difficult to convince pregnant women to go to the center for their regular check-up. Some of them expressed fear of the needle used to draw blood during the OGTT test while some said they didn't have enough time to visit the center even for pre-natal check-ups.

"Pushing" them towards the health center included texting, house-to-house follow-up and close coordination with the midwives, the center doctor, the lab technicians, the nutritionists and the diabetologists.

Grace became more confident later as she developed relationships with the mothers and their families. Here was when she tried to do more "pushes" for them to go to the health centers to seek for their required pre-natal consultations. Family members of the GDM moms would be grateful to her when they would meet along the roads of the barangay. So much so that her husband and children were amazed at how many people knew her now. Happy mothers with their newly-delivered babies filled her with joy, knowing she had somehow played a part in it.

One good strategy of the project is to integrate risk assessment in the pre-natal services. Because of the information regularly provided by the untiring and strict midwife in the health center on who had predisposition to GDM, Grace knew who to follow up for the OGTT test. She did house-to-house follow-ups for these women to go and have the test at the Novaliches District Hospital (NDH). A few months after the project onset, Grace had her hands full of GDM clients to monitor. It was actually the first time that coordination between the health center and the hospital and the push and pull referrals were actually appreciated.

Grace's push met a corresponding "pull" from the health workers, including the diabetologist, the OB-GYN's at the NDH and the very efficient handling of GDM clients at the health center through the midwives and the nutritionist who provided advice on the right

amount of food intake that the GDM clients should have including the exercise they should do to help their blood sugar return to normal level. Grace cited the big role of IRH in managing the project, including the provision of glucometers on loan and in providing the strips so that the clients can self-monitor their blood sugar levels in the comfort of their homes.

Grace facilitated the good complementation of these “pushes and pulls”. She helped create a desire for the pregnant women to establish their health situation and to seek help when they got diagnosed with GDM. The trust and confidence created between the health workers and the GDM clients became the “pulls” that attracted the GDM clients to continue their clinical consultations.

Such a combination contributed to the success of the project in recruiting pregnant women to be diagnosed, getting them to subscribe to the Clinical Pathway and leading majority of them to return to their normal blood sugar level. All these pulling and pushing efforts proved to be helpful. Majority of the GDM patients had their blood sugar levels return to normal. They gave birth to healthy babies while very few graduated to full blown diabetes because of other factors that affected their health. The most difficult push was in getting the moms to return for their postpartum 6-weeks after delivery for an OGTT.

Although Grace felt overwhelmed by the number of GDM patients she assisted through the project, she feels the contentment in this phase of her life, because she was able to help in her own small way to take care of pregnant women who gave birth to healthy babies. She continues to feel like an accomplished woman.

On the other hand, she also felt sad that other pregnant women were too hard-headed and were too difficult to convince about adopting a healthier lifestyle.

The story of Grace is a showcase that the work of a Community Health Worker does spell out good outcomes among the lives of the people she worked with in the confines of Barangay Gulod, Quezon City.

Dave BASACA



If there's anyone you need to rely on in Pasig, it is Dave Basaca, office of the City Health Officer.

He makes no promises, but he delivers: be it a memorandum, reservations in the most exclusive venues of the city, budget allocations, impromptu meetings, and representations to the top officials and a lot more.

How does he do it? He knows and appreciates the programs, he is so conversant with the intricacies of the public health structure, and is a great people person. Relationships matter in the real world.

IRH breezed through the three years of the project in Pasig going by Dave's ever-reliable interventions. Whether the assistance needed was with health centers down the line, or with the Pasig City General Hospital, Dave came through.

Asked about his thoughts on the GDM project in Pasig, Dave has this to say:

"It is a great honor to become part of this pioneering health project in the Philippines. Accessing GDM Care enabled us to give our patients access to timely, appropriate, and holistic gestational diabetes care. Access to a healthcare package determined by the actual need for health services and not the ability to pay."

If every manager had someone like Dave, the bureaucracy would certainly function better, here's to the next GDM initiative in the City of Pasig! With Dave of course, in the front and rear guards.

DEDICATION AND SELFLESSNESS

Exemplary Public Servant

A number of selected Mothers from Pasig City who had gestational diabetes on their last pregnancy and who were part of the Accessing GDM Project of IRH were interviewed and featured stories of their GDM journey. Almost, if not all of them mentioned that the person who was of great help to them during their pregnancy, and while they were struggling with GDM was the doctor from Pasig City General Hospital (PCGH). She is **Dr. Christy**



S. Yao, the only endocrinologist on board the project, who took care of every patient endorsed to her. As of January 2020, she single-handedly took on more than 200 GDM positive patients during their pregnancy.

When asked how she would describe the Accessing GDM Project at the end of three years, Dr. Yao says it with two simple but powerful words: "Challenging and rewarding." She further elaborates, "It was a worthwhile project with the goal of educating women and healthcare workers and helping GDM patients manage their condition. It was an opportunity to diagnose and manage patients in a better setting. What was sorely lacking in the past were access to 75 gm OGTT, glucometer and strips, which were provided in the project. This Project is a first of its kind, focusing on Gestational Diabetes Mellitus, which still does not have a universal policy in the Philippine health care system. The women we worked with are pioneers who received GDM care for the first time from our healthcare workers. However, the challenging part was that the "care was centralized at PCGH with limited manpower." After the GDM+ patient was diagnosed at the health center level, subsequent follow-up consultations were done at the hospital, since the

woman was already considered high-risk. The OB-GYN was seeing a hundred patients a day, referring them for OGTT and when found positive, to the hospital dietitian, then to the specialist. Dr. Yao was the only endocrinologist in the hospital. The nurse assigned was also the nurse for the teen pregnancy clinic. These realities do not include the other cases that the hospital caters to.

Highlighted by Dr. Christy on the project features was the “comprehensive approach from screening to diagnosis and management” wherein women were assessed and evaluated for risk factors, and if she had even just one of these, she was already considered as high-risk for GDM. Risk assessment was done at the local health centers, where the midwife or nurse would evaluate the pregnant woman. The midwife is a key player here because she is the first contact of pregnant women on their first pre-natal visit. In addition, as mentioned throughout this compilation of stories, the Project was able to provide the necessary materials that the GDM+ patients needed. From diagnosis, the project provided glucometers on loan and strips, and to some, insulin when needed.

Once diagnosed as GDM+, the first line of defense would be education—diet counseling and lifestyle modification. Throughout the pregnancy, close follow-up with her physicians should be constant. The OB-GYN co-managing with an endocrinologist play important roles in the management of GDM. Unfortunately, our public health system has limited health personnel. Dr. Yao was the only endocrinologist in PCGH for all the Pasig GDM patients, on top of other non-GDM cases. There were, however, GDM mothers who despite existing guidelines for high risk pregnant women, preferred not to deliver in hospitals.

Dr. Yao is definitely the best person to solicit for recommendations based on the Project experience, particularly since the population it served belong to low resource communities.

First is to have programs that will increase awareness of both patients and healthcare workers about GDM. As mentioned earlier in this article, Gestational Diabetes Mellitus does not have a universal policy in our national healthcare system yet. GDM is one of the lesser-known illnesses and so we must continue to work

on increasing awareness about it on both the patient side and the medical practitioner side.

Second is the promotion of a healthy diet and lifestyle among pregnant women in the community setting. The community serves as a support system for the patient. The patient does not feel like an isolated case that would often them to feel bad about themselves.

A **third** recommendation is to give training for healthcare workers (i.e. midwife, nurses, and physicians) in the local health center setting in the diagnosis and initial care of GDM cases. She added that many patients are averse to reporting to hospitals for several reasons—either distance, transportation costs, long queues, and others.

Fourthly, the next recommendation is to provide better access to laboratory testing and self-monitoring of blood glucose (glucometers and test strips). As mentioned earlier, many pregnant women could not afford the oral glucose tolerance test because the laboratory fees and the glucose solution were expensive. This recommendation has been surely addressed by the Project, and it proved to be very effective in managing GDM.

Her **last recommendation** is to have a close coordination for specialist care in the management of complicated cases, comorbidities, or need for pharmacologic treatment. There are really cases that would need co-management among several specialists and if we are to take the case of the experience from the Project, these are evidently lacking. Our public health facilities presently have limited manpower, and that includes medical specialists. We have to find a way to make sure that they will be available to attend to these special cases. Physicians in the local health centers can be trained and tapped for these patients. Complicated cases (with comorbidities, congenital anomalies etc.) as well as those requiring pharmacologic treatment can then be referred for specialist evaluation and management. This will probably be a more pragmatic approach given the limitations of our current setting. Crucial also is the provision of glucometers and strips for free, and insulin when needed. Dr. Yao says that “majority of GDM patients can manage their condition without pharmacologic

therapy. For those uncontrolled on nutritional therapy, insulin is still the mainstay of treatment as it does not cross the placenta to a measurable extent”.

Despite obstacles encountered in the Project, we could truly say that it was a success. We are truly grateful especially for the outstanding individuals and the institutions that made it possible. Foremost, was Dr. Christy Yao, who despite her very tight schedule practicing as an Endocrinologist, committed herself to the Project and took care of our GDM+ patients. Her dedication to the patients, her current recommendations for eventual mainstreaming of GDM care in the public health setting are milestones in themselves contributing to the success of our movement to address Gestational Diabetes Mellitus, saving mothers’ and babies’ lives.

“

*The women we worked with are
pioneers who received GDM
care for the first time from our
healthcare workers*

”

Project Diagram

To pioneer a model for accessing Gestational Diabetes Mellitus (GDM) care in the local government (public health) settings, involving two public hospitals and four health centers in two sites.

Component 2:

Capacity Building

- April 2017
- Refreshers in 2018 & 2019

Component 1:

Mobilization and Research

- Jan-June 2017

Component 3:

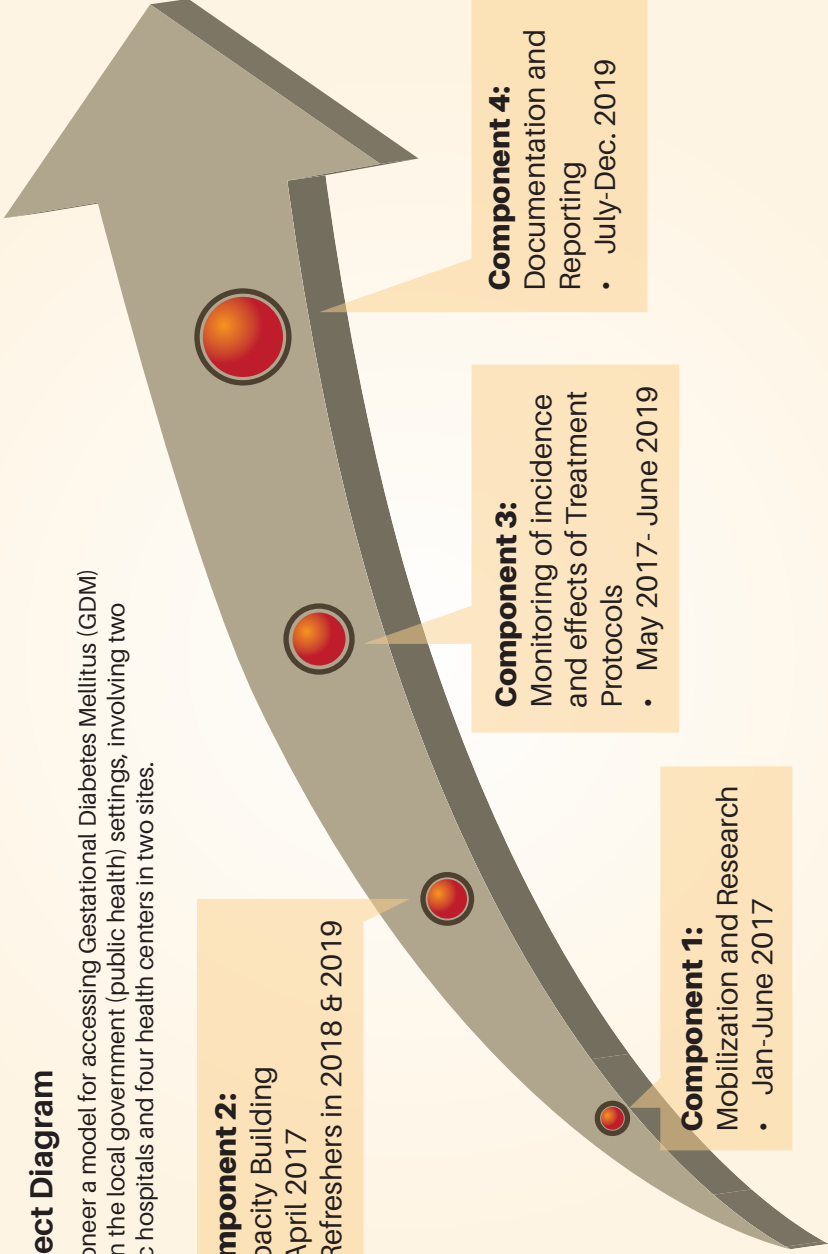
Monitoring of incidence and effects of Treatment Protocols

- May 2017- June 2019

Component 4:

Documentation and Reporting

- July-Dec. 2019



Ang Daloy ng Paggamot sa "GDM Nanay"

**Community/
Hospital**

BHW/CHW OPD
(notebook listing)

Health Center Admission MW

III, T.R./Project ITR
(w/ risk factors,
color coded) specifically
for GDM
Patient

**Pre-Natal
Check-up MW**
High-risk Buntis

Nurse

- Instruction on glucometer use
- Schedule Nutrition Education
- Have list of GDM (+)
- Schedule Exercise (to be taught by Midwife)

**Health Center MD /
Attending Physician**

(in the absence of
physician, nurse may refer
to dietitian if (+) GDM for
Nutrition Education)

Laboratory (RMT)

- Ask preps done by Patient
- OGTT Test
- Returns for result (same day)
- Tell patient to give result to Doctor
- Have a list of (+) GDM

**Health Center Doctor/
RN / MW / RND**

- Lab request OGTT
- Instruct on OGTT test preps & test
- Give flyer on test
- Tell patient to return result
- LIST names of patients referred to LAB

**Nutritionist/
Dietitian**

- Have list of GDM (+) who attended Nutrition Education
- Food Diary
- Glucose Level + Exercise Journal

OB-GYN

Regular check-up,
with GDM Client
Record

**Endocrinologist/
Diabetologist**

If GDM not managed,
insulin treatment

Delivery

6 weeks
post partum
OGTT 75g



Prepared by :

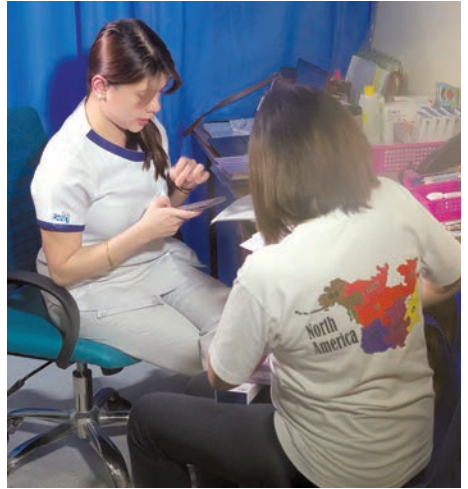
Institute for
Reproductive Health
Philippines



















AFTERWORD

Just obey our healthcare providers!

This is the advice of mothers who experienced GDM featured in this compilation.

Indeed, the stories show us that adherence to the Accessing GDM Care Project protocol in managing GDM did lead to positive health outcomes.

On the other hand, there is a need for further investigation on how complications due to GDM can end up in casualties that can be prevented.

We hope this initiative spurs research and action programs responsive to changes in lifestyle that would better ensure the health of mother and child throughout pregnancy to childhood.

From our end, it has been a very fulfilling experience, not without difficulty, especially in project management. But certainly, coming face to face with the realities of life has left us still hopeful, and better able to keep partnerships even in these challenging times as the project winds up.

We wish to thank each and every one who in one way or another, contributed to a very real hands-on initiative.

Our gratitude to the World Diabetes Foundation for making it possible to turn this vision into a reality.

*The IRH Project Staff
August 2020*

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With thanks to :

The city governments of Quezon City and Pasig

Quezon City Health Department

Pasig City Health Office

Gulod Health Center

Novaliches District Hospital

Manggahan Super Health Center

Napico Health Center

Karangalan Health Center

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