UNIVERSITY OF THE PHILIPPINES MANILA

Community Health and Development Program

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IPE Case #1

Your team was assigned to extend services in a rural barangay in Batangas. In the latest census, the barangay has a population of 658 with corresponding 141 households. There is an almost equal male to female ratio and a predominance of adults and elderly. The main source of livelihood is agriculture. The barangay has an internal revenue allotment (IRA) or their annual budget of almost 1 million pesos. Based on the barangay report, the budget is mainly allocated for personnel services (honoraria of barangay officials, staff and health workers). They do not have specific allocation for health, but rather integrated to the other components of their budget plan, such as (1) Maintenance and Other Operating Expenses (MOOE) for the utilities used in the health center, (2) Infrastructure (renovation of health center if applicable) and (3) personnel services (honoraria of barangay health workers). For the health programs, the barangay relies on programs being implemented at the Rural Health Unit (RHU). There is no barangay-initiated program for health. Equipment and medicines are also provided by the RHU. Unfortunately, the medical equipment in the barangay health center is not well-maintained, and supply of free medicines is dependent on the procurement from the Municipal Health Office (MHO) and is not consistently provided. There are no dentists in the barangay or even in the municipality. There are no private dental clinics and a government dentist from the provincial health office is only available for dental missions providing tooth extraction service only upon request by the municipality.

The barangay health team is composed of (1) a midwife who is available for primary care consultation, including prenatal check-up, once a week; (2) 4 BHWs, each assigned to a purok composed of about 40 households; and (3) a Barangay Nutrition Scholar. The midwife is a staff of the RHU, thus her salary comes from the municipal office. Each BHW receives Php 700 per month, given as Php 2,800 on a quarterly basis. There is no record in the barangay about PhilHealth coverage. Social services are provided at the municipal office such as medical emergency fund for the indigents (Php 1,000), registration and issuance of ID for People with Disabilities and Senior Citizens. There are four organizations in the community (senior citizens organization, a farmers' cooperative, a Catholic church group and a women's organization) but only the church group has regular activities. There are no therapy and rehab centers in the municipality. They were referred for physical therapy services at 45.1 kms away.

A community member was referred to your team by one of the BHWs for home care. The patient is LM, a 64-year old female, single, left-handed, who had a stroke a month ago. LM is bedridden and now lives with her 70 year older sister. According to the BHW, the older sister of LM is also hypertensive. The BHW felt that LM's caregiver must be given instructions on how to take care of the patient. LM also needs a "check-up and therapy" because of her condition.

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LM has had hearing and speech impairment since birth. She communicates through hand signals or drawing pictures. She can write her name and numbers. She did not undergo formal schooling but was taught at home by her older siblings.

LM used to work in a small piece of land that she inherited from her parents. She would plant vegetables and sell them at the municipal public market. She lived in a 2-bedroom house that she owned. LM's adopted daughter and her family lived in the house as well. She was independent in terms of activities of daily living before the stroke.

LM was diagnosed with hypertension about 5 years ago. According to the BHW, the patient was a regular patron of the barangay health center. She visited the center weekly to have her blood pressure checked and to get medicines for her hypertension. She has been on different regimens depending on what type of anti-hypertensive drug is available at the center. Since the start of the year, the BHW noticed that the patient's blood pressure has been persistently elevated. Her medicine is usually a Metoprolol 50mg tablet, taken two times a day. LM was referred several times to the Rural Health Unit so that she could be assessed by the municipal health officer but was unable to comply. Public transportation, through a tricycle, from LM's barangay would cost her a total of PPh200. This was a considerable amount for LM. The BHW also added that LM has difficulty traveling because she cannot sit for a long time in a tricycle. LM had a fall injury last year and since then she had difficulty in ambulation and persistently complained about low back and left hip pain.

Only a month ago, LM had a stroke. She was doing household chores when suddenly had left-sided weakness. With the help of her neighbors, she was brought to the District Hospital located in the municipality. LM's family was told that she was having a stroke and must be brought to the Batangas Regional Hospital. However, the family opted to stay at the District Hospital. LM was admitted for 2 weeks. Upon discharge, she had weakness of the left upper and lower extremities. She was unable to walk but can maintain sitting for a few minutes. She used her right hand for gestures and pointed to objects. She had facial asymmetry, was drooling and had difficulty eating . Her hospital records indicated a discharge diagnosis of (1) S/P Cerebrovascular Attack, probably Infarct, with left-sided residuals, (2) Hypertension Stage II, uncontrolled, (3) Neglected Fracture, left femur, (4) Dyslipidemia, (5) Hyperuricemia. Her home medicines included: (1) Enalapril (Hypace) 10 mg/tablet, 1 tablet once a day, (2) Atorvastatin (Lipitor) 20mg/tablet, 1 tablet once a day, (3) Allopurinol 200 mg/tablet, 1 tablet once a day, (4) Amlodipine (Norvasc) 5 mg/tablet, 1 tablet once a day, (5) ASA (Aspilet) 80 mg/tablet, 1 tablet once a day, (6) Calcium (Caltrate) tablet, 1 tablet once a day, (6) Celecoxib (Celebrex) 200 mg/capsule, 1 capsule once a day, and (7) Multivitamins (Centrum) capsule, 1 capsule once a day. She has been inconsistent in drinking her meds because of financial difficulties and difficulty swallowing a tablet. Medication review was not performed, thus, scheduling of LM's medications was not done and drug interactions were not checked.

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After the hospitalization, LM's family decided that she had to stay in the house of her older sister and brother-in-law. Her brother-in-law works in their own farm while her older sister tends to her needs in between taking care of her 3 grandchildren. Also her sister cannot provide for the needs of LM due to the small amount of money that her husband earns from farming. Their diet usually consists of vegetables that come from their farm. Your team visited LM at her sister's home after the referral.

The house where LM is staying is a bungalow-type, around 60 sqm and made of concrete. It has a receiving area with two big windows, 2 bedrooms, a comfort room, a kitchen for cooking and a dining area. Only the flooring at the receiving area is cemented. LM's bed is at the receiving area beside one of the windows.

- For bathing, she is seated on a monoblock chair. not everyday bathed
- fully dependent on sister in dressing, grooming and feeding
- She was reported to frequently cry.

The results of physical assessment of LM is shown below:

- Awake, lying in bed, communicates in gestures, able to follow simple commands with instructions given as gestures, not in cardiorespiratory distress
- BP 150/90 HR 84 RR 18 T afebrile
- Anicteric sclerae, pink conjunctiva, no cervical lymphadenopathy, no neck vein engorgement, no tonsillopharyngeal congestion, (+) impacted cerumen both ears, (+) drooling,
- Oral examination reveals pink gums, tooth number 14 equibone root fragment, rounded maxillary and mandibular alveolar ridges, slightly resorbed ridge in left maxillary posterior area, and small torus palatinus, open mouth posture, tongue deviated to the right. She used to wear good fitting full upper and lower dentures before the stroke.
- Equal chest expansion, clear breath sounds, (-) rales/wheezes
- Adynamic precordium, distinct heart sounds, normal rate and regular rhythm, (-) murmurs, point of
- maximal impulse at 5th intercostal space at the left midclavicular line
- Soft flabby abdomen, hyperactive bowel sounds, (-) tenderness, (-) organomegaly, (-) masses
- Bladder and bowel functions: (+) diaper
- pink nail beds, (-) edema, skin was warm, full and equal pulses
- Cranial Nerves Examination:
    - CN I: grossly intact
    - CN II: pupils 2-3 mm equal, briskly reactive to light
        - right eye: (+) red orange reflex, clear media, cup/disc ratio 0.3, artery/vein ratio 2:3
        - left eye: (-) red orange reflex
    - CN III, IV, VI: full EOMs, no preferential gaze
    - CN V: intact sensation over face

- CN VII: (+) facial asymmetry, weakness of left buccal muscles
- CN VIII: grossly intact
- CN IX, X: (+) cough reflex
- CN XI: unequal shoulder shrug, R>L
- CN XII: tongue deviated to left
- MMT: RUE 5/5, LUE 0/5, RLE 5/5, LLE 0/5
  - (+) intact pain sensation over left side of body, no sensory deficits over right side
  - (+) limitation of passive motion of left extremities 2 to pain
  - DTRs ++ all extremities, (-) clonus

- Range of Motion
  - Gross assessment of the ff joint motions were done and were found to be of the ff:

Joint Motion	Range of Motion	End-feel
L shoulder flexion	~ 0 – 130˚	Empty
L shoulder abduction	~ 0 -120 ˚	Empty
L elbow flexion	~ 0 -160 (full range)	firm
L elbow extension	~ 145 – 0 (full range)	firm
L hip abduction	~ 0 – 15	empty
L plantarflexion	~ full range	
L dorsiflexion	~ 0 - 10	

- Tone Assessment
  - Gross assessment of tone was done. L LE was observed to be hypotonic or flaccid
- Functional Muscle Testing / Manual Muscle Testing
  - Functional muscle strength on R UE and LE. Pt is able to help in pushing herself while being assisted into supported sitting position
  - Blood pressure remained stable during the physical assessment
  - L UE and LE muscle strength not tested. However, it was observed that pt is unable to move L UE and LE
  - Weakness on the lower left side of the face was observed. There is drooling and spillage of water.
- Feeding/Diet
  - (-) NGT, fed in teaspoons of lugaw, occasionally coughs; finishes a ~ 200 ml bowl in 30 mins; frequently coughs with water.
- Skin Integrity
  - no redness observed over skin area
  - loose and dry skin was observed

- Functional Assessment

Activity	Status
Bed mobility	Pt is able to turn self into side lying position independently. However, it was observed that when patient assumes R sidelying position, L UE does not go along with movement and has to be carried by pt or caregiver
Self-care	Dependent on caregiver Self-care activities are done in bed c pt in supine or supported long sitting position Pt occasionally helps by moving the head and using R LE and UE.
Sitting	Unable to assume long sitting or short sitting from supine independently; However, pt shows initiative to help in assumption to long sitting using R UE and LE. Pt is able to tolerate supported long sitting

You have three weeks of community rotation and are being invited to develop a management plan for the patient.

Given the situation stated above.

1) Describe the general steps in formulating the management plan.
2) Identify three (3) priority management goals.
3) Identify three (3) important stakeholders you will engage in the management and their roles/tasks.
