Transforming NCD care services by keeping people at the heart of care provision: primary health care initiatives in Punakha and Tsirang, Bhutan

Embarking on a paradigm shift in care

People with chronic diseases need lifelong care and support. Care must be coordinated, continuous and, as far as possible, provided nearest to where people live. Multiple factors such as health literacy, patient motivation and availability of health services determine the outcome of chronic diseases. Health-care services often do not provide optimum services that address the need of the patients with chronic diseases.

Bhutan was one of the first countries globally to adopt the WHO Package of Essential Noncommunicable disease interventions (PEN) programme and scaled it up nationwide in 2013–2014. A PEN clinical audit conducted in 2016 indicated several shortfalls in care practices for hypertension, diabetes and other chronic diseases. After patients were treated for symptoms of chronic disease, there was little follow up by the facility; medicine refills were not monitored carefully, leaving patients to manage alone, often with poor results. Patients with chronic illnesses, such as house-bound terminally ill individuals, stroke and cancer patients, and others needing palliative care were often not reached.
To address these gaps and improve the care of such patients, the Ministry of Health with the support of the World Health Organization introduced “people-centred care” in two districts of Punakha and Tsirang in 2019. The new initiatives aimed at improving deficiencies with the earlier PEN approaches. Training was conducted for health workers at the district and basic health unit (BHU) in March–May 2019.

People are left behind and services are not proactive to chronic care needs

In addition to ambulatory care for hypertension and diabetes provided by BHUs, there are a substantial number of patients with noncommunicable diseases (NCDs) such as stroke, and disabled and paraplegic patients who require continuing care (please refer to the tables). Service provision for these patients is generally not proactive in meeting the needs of these patients. Patients living with chronic problems in general do not receive routine home visits by health workers. Services are restricted to health facilities for only those people who seek services.

Table 1. Number of patients with chronic illnesses in Punakha and Tsirang districts

<table>
<thead>
<tr>
<th></th>
<th>Punakha</th>
<th>Tsirang</th>
</tr>
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<tbody>
<tr>
<td>Number of hypertension cases</td>
<td>1113</td>
<td>2430</td>
</tr>
<tr>
<td>Number of diabetes cases</td>
<td>1044</td>
<td>3514</td>
</tr>
<tr>
<td>Number of suspected stroke cases</td>
<td>15</td>
<td>17</td>
</tr>
<tr>
<td>Number of heart attack cases</td>
<td>30</td>
<td>17</td>
</tr>
<tr>
<td>Number of cancer patients under follow up</td>
<td>25</td>
<td>16</td>
</tr>
<tr>
<td>Number of house-bound patients</td>
<td>11</td>
<td>23</td>
</tr>
<tr>
<td>Number of elderly patients needing medical support</td>
<td>26</td>
<td>139</td>
</tr>
<tr>
<td>Number of COPD and asthma cases</td>
<td>58</td>
<td>357</td>
</tr>
</tbody>
</table>

COPD: chronic obstructive pulmonary disease

Table 2. Patients with chronic illnesses in Punakha BHU areas, April 2019

<table>
<thead>
<tr>
<th>Health facilities</th>
<th>Number and case types</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shengana BHU</td>
<td>1 – cerebral palsy, 1 – spinal cord injury, 1 – visually impaired</td>
<td>3</td>
</tr>
<tr>
<td>Goenshari BHU</td>
<td>1 – Delayed development</td>
<td>1</td>
</tr>
<tr>
<td>Tshochagsa BHU</td>
<td>1 – Delayed development, 1 – stroke, 1 – paraplegia</td>
<td>3</td>
</tr>
<tr>
<td>Samdengkha BHU</td>
<td>1 – Stroke, 2 – cancer, 1 – paraplegia</td>
<td>4</td>
</tr>
<tr>
<td>Thinleygang BHU</td>
<td>4 – Stroke, 3 – cancer</td>
<td>7</td>
</tr>
<tr>
<td>Kabesa BHU</td>
<td>4 – Cerebral palsy, 1 – cancer, 1 – stroke, 3 – physically disabled</td>
<td>9</td>
</tr>
<tr>
<td>Nobgang BHU</td>
<td>1 – Stroke, 3 – cerebral palsy</td>
<td>4</td>
</tr>
<tr>
<td>Lobesa BHU</td>
<td>2 – Cerebral palsy, 1 – cancer, 2 – stroke, 3 – physically disabled</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
<td></td>
</tr>
</tbody>
</table>
Practices prevailing before implementation of people-centred PEN HEARTS

- No standard-of-care practices or outreach services were provided for patients with chronic diseases living in communities; health workers visited patients in communities only at the request of patients or carers.

- When patients requiring medicine refills for hypertension and diabetes visited BHUs, health assistants simply directed them to hospitals. For most patients, this meant undertaking many hours of travel either on foot or by vehicle even for a simple medicine refill, leaving behind farm work and cattle.

- No patient reminder and recall system was in place to reach patients who interrupt care.

- Patients treated at the hospital were not generally referred back to the BHU.

- Medical officers and hospital teams were generally disengaged from BHU services except during certain emergencies and outbreaks.

- No joint supervisory visits were made to BHUs by District Health Offices (DHOs) and medical officers.
People-centred PEN HEARTS interventions

The focus of the PEN HEARTS programme is to improve services through an integrated approach to NCD management, especially cardiovascular diseases (CVDs) and diabetes. The objectives are:

1. to make it easier for patients to obtain diagnosis of and care for chronic diseases, and to continue in care;
2. to adapt procedures and responsibilities so that primary care facilities (district hospitals and BHUs) can track patients and follow up with them to ensure that care is provided continually with positive outcomes; and
3. to encourage innovation at the district level to develop more effective procedures and motivate patient follow up in particular.

The SEVEN components of the people-centred PEN HEARTS programme

Progress and stories from the two districts

Numerous positive developments taking place in the two districts indicate that there is potential for reorientation of NCD service delivery at the primary health care level in Bhutan. The following sections document inspiring narratives in implementing various components of people-centred NCD services at district hospitals and BHUs.
On the fringes of social neglect and challenges to hypertension treatment

Mr Phub Dorji, a 70-year-old male residing in a makeshift shed, is a patient of hypertension (BP of 200/120 mmHg). In addition, he is suffering from restricted mobility due to disability. Poverty stricken, his wife is his only supporter. She collects medicine refills for him. Due to implementation of strategies for a people-centred approach to care, his access to medical support changed. He is being followed up by the BHU team for monthly medication.

Mrs Sonam Choki, (Health Assistant, Samdingkha BHU II), Punakha

Elderly care needs, treatment interruption and continuity of care

The Central Monastic Body has established a residential retreat centre for elderly monks in Tsochasa under Limbukha Geog. Among 20 elderly monks residing in the centre, nine were on treatment for hypertension. Elderly monks were expected to visit Punakha hospital for medicine refills. The centre located on a hillock away from the main road and posed a challenge for transportation; as a result, treatment interruption was high among the elderly monks.

After the introduction of the people-centred concept of NCD services, on twenty-eighth the of every month, a health assistant from the nearby Tsochagsa BHU visits the centre and provides follow up and medicine refills. The health assistant also coordinates blood sample collection by a laboratory technician from Punakha hospital.

Mr Thinley Norbu (Health Assistant, Tshochasa BHU II), Punakha
Treating the person and not merely providing symptom management

Earlier, health workers treated symptoms and diseases. Health workers now provide a comprehensive person approach for management. Irrespective of the purpose of the visit, health workers:

- check blood pressure in those 18 years and above;
- discuss alcohol, tobacco and other lifestyle risk factors and provide brief advice/counselling using motivational interviewing and the 5As and 5Rs;
- conduct AUDIT screening for alcohol users;
- measure body mass index (BMI) and calculate 10-year CVD risk;
- register patients for refill and recall and make reminder calls;
- collect refill medicines from hospital for patients needing additional medicines not available through routine supply at the BHU;
- coordinate referrals and back-referrals between the BHU and district hospital;
- make community outreach visits to house-bound patients.

Community and home outreach is the essence of people-centred care for NCDs

In the past, most of the outreach services were focused on immunization and pregnancy check-ups, and emergencies related to childbirth, injury and trauma. Although home calls and outreach are a necessary component of chronic care, health workers were usually not required to provide outreach to chronic patients as a routine service. The two districts have initiated routine outreach for patients with stroke, paralysis and cancer for palliative care, and house-bound elderly patients too frail to seek services at health facilities.
After three years of paraplegia, finally back to care

Mr Thinley Wangdi, a 54-year-old with fracture of the C4–C5 vertebra sustained through a fall three years ago was treated at JDWNR Hospital and discharged. The district health team came across the patient recently when conducting an NCD screening programme in Pateri Kabisa Geog in June 2019. He was admitted in the hospital and provided physiotherapy for paraplegia for a week and discharged with advice for self-care. He will be followed up at the hospital at routine intervals henceforth.

Punakha hospital inpatient department

I visit his home to change his catheter

A 45-year-old man in the catchment area of Shemjong BHU was bedridden at home and was not able to come to the BHU. After implementing people-centred PEN, I initiated a routine visit to his home to change the urinary catheter initially provided in JDWNRH, Thimphu. He needed a fortnightly catheter change. No referral call-backs were made to us at the BHU and none of his relatives informed us either. Now, he is comfortable with the scheduled catheter change.

Tashi, Sr HA, Shemjong BHU-II, Tsirang District

Fundamental shift in the mindset of health-care workers

People-centred care has changed the perception and mindset of health workers and managers. Health workers now offer services to patients with compassion and in a professional manner, treat patients with dignity and respect, and communicate treatment decisions and self-care. They also discuss and clarify treatment outcomes and expectations in a professional manner. Health workers facilitate problem-solving with the patient related to their care and treatment needs.
No one should be left out of care. Unmet nursing care should be addressed for every patient

Kenchom Zam (name changed), an 82-year-old female patient with stroke, was referred to Thimphu for further treatment for urinary incontinence. She was sent back with the advice to change the catheter fortnightly. Except for the written advice on the discharge paper, no referral call-backs were made from the JDWNRH. One day, her son (who is a monk) came to the patient ward and requested for help. After initial reluctance, I sent a nurse to help his mother. After the training, we felt responsible for house-bound patients such as Aum Kencho Zam, and that they should not be left out of care. Now, the Nursing Department of the Tsirang District Hospital provides a fortnightly catheter change and other related nursing services such as prevention of bedsores to Aum Kencho.

Tshering Dem, Nursing in-charge, Tsirang District Hospital, Tsirang

Putting patients at the centre of care in Punakha Hospital

In the past, in Punakha District Hospital, organizing NCD services was assigned to a single staff member. Follow up and coordination of care was weak.

After introducing people centred-care, staff now puts the patient at the centre of care. The hospital team maintains a separate chronic disease registry. A triage counter has been designated for patients above 18 years. The NCD Registry and Dietary Unit have been relocated close to the doctor’s chambers for the convenience of patients. A focal person coordinates follow up for patients missing treatment.

Alcohol audit forms have been provided in all doctors’ chambers, NCD chamber and the inpatient ward. For better communication, staff uses WeChat Apps to discuss, support and manage cases. A core team consisting of a five members has been formed. They participate in monthly meetings with the quality assurance (QA) team of the hospital.

Punakha Hospital team
Patient recall and a follow-up system is fundamental to NCD care

Patients diagnosed with hypertension, diabetes, COPD, asthma, cancers or those living with terminal illnesses require long-term follow-up care. Patients are likely to interrupt care for many reasons. Health facilities have introduced a proactive recall system to reach out to patients interrupting care and support them for continuing care.

Simple yet very effective recall system

Sancha Rai, a 66-year-old female hailing from a remote village under Barshong Geog, has been on treatment for diabetes and hypertension since May 2019. After she failed to return on her due date of visit, I called her up after checking the registry for contact details. She told me that she forgot to inform her daughter-in-law about the balance of medicines. She reported to the BHU the next day. Thanks to the simple recall system we have instituted, we were able to follow up Sancha Rai and provide her medicines without prolonged interruption.

Duba Tshering, Sr HA, Barshong Geog, Tsirang District

Refill of medicines between hospital and BHUs

Not all NCD drugs are routinely supplied to the BHU levels. These include certain classes of antihypertensive medicines, antidiabetic medicines, statins, bronchodilators prescribed by doctors and specialists at a higher centre as per the clinical needs of a patient. The procedure for requisition of refills from a higher centre using Form III had not been fully activated in two districts. Now the two districts have implemented refills using Form III and people with diabetes and hypertension are receiving the medicines at the BHU.
After the implementation of PEN HEARTS in our hospital, the refill of drugs from BHU has become systematic and proactive. The hospital pharmacy now not only issues drugs on a quarterly basis but we also track patients missing their medicines. Moreover, we now have the patient list from two BHUs. And to take patient counselling a step ahead, a pharmacy team will now improve medication counselling to address polypharmacy.

Leki Dorji, Pharmacist, Tsirang District Hospital

Full of smiles, praises and gratitude

Aum Kinley Wangmo from Thinleygang has been taking diabetes treatment for seven years. Every 30 days, she used to travel to Thimphu for refill of medicines. Often, it took two days to reach home with the refill. Health assistants of Thinleygang BHU have now been providing her medicines at the BHU for four months. She says, “I am now able to work at my farm and save money that I spent for the refill trip to Thimphu.” Aum Kinley is full of smiles, praises and gratitude for the staff at Thinleygang BHU.

Dr Gampo Dorji, WHO Regional Office for South-East Asia during a field trip

Care coordination and people-centred referrals are deeply satisfying

Referrals may include patients with or without emergency conditions. Two districts have taken initiatives to make the referrals friendly by seeking prior appointment for referrals from district hospitals and providing counter-referral of patients from the hospital to BHUs providing information on the outcome of the treatment and follow-up management. The BHU and hospital teams consult each other about the patient during the referral. Patients are well-informed on the expected services at the referral hospital.
Chandika Aley, a 57-year-old from Phuntenchu gewog, used to have difficult times being sent from BHU for her monthly laboratory tests to Tsirang hospital. She used to ferry local bolero trucks paying Nu. 540 for a trip. Often, her tests would be postponed to next day due to overload laboratory works in the hospital. Recently, she noticed that her test dates were being pre-confirmed by the BHU with the Laboratory Unit in the Tsirang Hospital. Her tests always get done on the day of her visit and she can reach home the same day by the public transport bus, paying Nu. 50 a trip.

Shreejana Luitel, Lab Officer; Tsirang Hospital

With the introduction of PEN, BHUs seek prior appointment with doctors at the hospital for referral of non-emergency cases. Upon tele-consultation, if the case cannot be managed at the BHU, staff fixes an appointment date with the hospital. Similarly, when patient is discharged from the hospital, the Drs/Nurses call up the BHU staff of that particular catchment area and discusses routine follow up and review needs. This is something simple, yet never done in the past. It brings a great sense of personal satisfaction. This really could become a standard practice in health services in our country.

Dr. Sonam Phuntsho, GDMO, Tsirang Hospital

A good record-keeping is essential for longitudinal care

A good information system is required to track the outcome of treatment over time. Individual patient records and health information systems need to be upgraded to address information needs. Simple patient records have been initiated with longitudinal visits. The need for proper prescription records is illustrated by the health assistant in Barshong BHU.
**Patients with chronic illnesses and their medical record books**

-Barshong Gewog is far away from the Dzongkhag town and the least developed among 12 Gewogs in Tsirang. Patients have difficulty in buying a medical prescription handbook for documenting their health facility visits. Therefore, I sponsored a handbook to each patient to maintain their individual follow-up record for medication.

-Duba Tshering, Sr HA, Barshong Geog, Tsirang District

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**Strong leadership, smart management and supportive team work is the backbone of chronic care**

Delivering high-quality, people-centred and integrated health services requires the creation and nurturing of collective engagement, commonly held values, good communication, teamwork and transparency.

At the health facilities, staff has taken initiatives to redistribute work among clinical and nonclinical staff. Team work, coordination and a sense of belonging among various groups of health-care professionals have improved for delivery of people-centred NCD care.

**Building a culture of collective learning: clinical mentoring and supportive supervision**

Continued supportive supervision and clinical mentoring is critical to improving a team-based approach, enhancing clinical practice and building person-centred health facilities. Teams at the hospital are seeking feedback from BHU staff to improve people-centred PEN services. Similarly, BHU staff is proactively providing feedback to hospital teams.

-DHO and CMO are a part of the same team even for BHU services
Peer coaching for NCD care

Clinical practice in NCD care requires health workers to have clinical decision-making skills for a wide range of health conditions. Health assistants require constant support and guidance from trained team members or related experts. Trained health workers coach staff who did not attend the PEN HEARTS training.

We can learn from each other: PEN peer coaching in MCH in Tsirang Hospital

PEN peer coaching was provided to MCH staff of the hospital and BHU staff who were off duty during the PEN training.

Learn, share, solve problems and inspire each other – communication is the key

After implementing integrated people-centred PEN HEARTS, two districts have introduced a WeChat social media group and telecommunications to improve correspondence and communication. The WeChat groups called “PEN-HEARTS Tsirang” and “Punakha PEN HEARTS” have become an active forum for discussion and sharing of information.
People centred-care brings satisfaction to health workers

The people-centric approach is needed for all types of services such as communicable diseases, and maternal and child health. A people-centred approach is a paradigm shift and a transformative approach for overall health-care provision, and not just for NCD services. It promotes the value of compassion and care for people seeking health services.

“We could have offered this type of care much earlier, but it is still not late. Once household members are reached, they take major responsibility for supporting patients in their household.”

Sonam Doya at Samdengkha BHU

Key messages

- Visits to communities and homes are essential to improve NCD care
- Role of health workers need to be formalized for community outreach for NCD services
- Proper transportation arrangements will be required to support the refill of medicines to BHUs
- An able district health services management team is critical to lead the people-centred NCD services

Summary of the people-centered approach

As illustrated above, a summary of the people centred actions for delivery of NCD services in Punakha and Tsirang include the following:

(1) set up triage at hospital for better patient flow in the outpatient department;

(2) created a list of patients with chronic illnesses, including diabetes and hypertension;

(3) introduced telephone follow up from BHUs and hospital for patients missing their monthly refill;

(4) introduced outreach visits for health workers to attend to house-bound patients with terminal illness or disability and patients with poor social support;

(5) hospital pharmacy units supplied medicines to BHUs using Form III on a named-patient basis;

(6) a social media forum set up for all health workers in all health facilities;

(7) DHO, CMO and MO along with relevant staff visited BHUs for supportive supervision; a standard checklist and feedback tools are used;

(8) data forms for longitudinal patient records introduced and control rates for hypertension and diabetes at health facility monitored.
Following the success, the two additional districts of Wangduephodrang and Zhemgang will implement the people-centred PEN HEARTS programme.

Wangduephodrang DHO, CMO and the MOH making ceremonial launch of the PEN HEART social media group on 14 August 2019.

Zhemgang DHO, MO and the MOH making ceremonial launch of the PEN HEART social media group on 14 August 2019.
PEN HEARTS reaches to a leprosy patient

Person suffering from leprosy have had to bear not only torturous affliction but also the social rejection as a result of this illness. The myth – ‘Curse of god’ and ‘Concept of sin’ played a major role in it.

The story of ApDorji (name changed), 71 from Barp, Punakha provides bouts of unbearable agony that forced him into isolation. This disease, though curable, yet carries a stigma so strong that leprosy-affected people like ApDorji, have been forced into isolation for centuries. Why is this disease so feared, and how can we help those who suffers from it? Do we have another Dr. A. Hansen – who provided hope of finding a cure when he discovered the bacteria that causes leprosy – to cure stigma and misunderstanding attached with leprosy? PEN HEARTS programme brings medical care services at the doorstep of AP Dorji and other social institutions can break the stigma and misconception to give hope in life of a person with leprosy like Ap Dorji.

ApDorji, having no children, his right leg amputated and his wife, instead of being beacon to her crippled husband, abandoned him few months ago. He had a nephew (monk), who had planned to accompany him for artificial limb in Thailand. Unfortunately, his nephew passed away before fulfilling his dream. Today, Ap Dorji is all alone and dragging his life with all home chores and rearing domestic animals. He relies on the crutch that was provided through the PEN HEARTS imitative.

Previously he used to come twice a week to Punakha hospital for wound dressing and once a month to change of crutch tip. Staff at the Lobesa Subpost now provides the weekly dressing.

There could be many unheard stories following a pattern similar to ApDorji’s in the country. Instead of guilt and hopelessness consuming him, he was found focused on positive values in life and is determined never to give up. Although Ap Dorji’s story does not end here, many leprosy patients’ stories end on a tragic note of despair, however he chooses to plod through the rest of his life alone and abandoned. How can we help ApDoji to be valued as human? Not the moment society defines him by his disease.

"Being disabled should not mean being disqualified from having access to every aspect of life.” – Emma Thompson

Sonam Wangmo, Punakha Hospital & Jamuna Chhetri, Lobesa Subpost