

Practical training for ILO6

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HEALTH SCHOOL**
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Content

Practical training: Plan interventions to improve health literacy and digital health in older adults in Nursing	4
Part One	4
Part Two	5
Sample scenario:	5
Part Three.....	6
Sample scenario:	7

Practical training: Plan interventions to improve health literacy and digital health in older adults in Nursing

Target Audience: Final year Nursing undergraduates

Total Duration: 6 practical hours (Part 1: 2 hours; Part 2: 3 hours; Part 3: 1 hours)

Learning Objective: Plan interventions to improve health literacy and digital health in older adults in nursing using evidence-based strategies.

Topics: design interventions and effective communication; develop personalized digital health education plans; monitoring and evaluation, adapt for individual progress, collaboration with other health care professionals, consider ethical principles

Part One

Hours	Topics	Activities
2	Designing health literacy interventions and effective communication strategies	Role-Playing: Explaining Exercises (60 min): Students pair up. One student acts as a nurse, the other as an older adult patient. The "nurse" explains a simple exercise (e.g., ankle pumps, sit-to-stand) using plain language and visual cues. The "patient" then "teaches back" or "shows" the exercise. Rotate roles. Visual Aid Creation (40 min): In small groups, students design a simple visual aid (e.g., a pictogram, a simplified instruction sheet) for a common exercise, keeping older adults with low literacy in mind. Group Feedback & Discussion (20 min): Share and critique visual aids and discuss challenges encountered during role playing.

Part Two

Hours	Topics	Activities
2	Problem-solving	Scenario-Based Problem Solving (60 min): Present students with several scenarios where an older adult is struggling with a health or digital health intervention. In groups, students devise monitoring strategies, evaluation methods, and adaptation plans for each scenario.
1		Feedback Loop Practice (45 min): Role-play scenarios where the "nurse" receives feedback from the "patient" (e.g., "I can't remember how to use this app," "The instructions are too small"). Students practice adapting their approach in real-time. Group Debrief (15 min): Discuss effective strategies for monitoring, evaluating, and adapting interventions.

Sample scenario:

Here's a vivid scenario that captures the real-world challenges an older adult might face when navigating a health or digital health intervention:

Scenario: Mrs. Nalini Fernando and the Remote Monitoring Program

Patient Background

- **Name:** Mrs. Nalini Fernando
- **Age:** 72
- **Location:** Galle, Sri Lanka
- **Living Situation:** Lives with her younger sister, who works full-time
- **Medical Conditions:** Heart failure, Type 2 diabetes, and vision impairment due to diabetic retinopathy
- **Language:** Sinhala (limited literacy)
- **Technology Access:** Basic smartphone with intermittent internet access

Health Intervention

Mrs. Fernando was enrolled in a **remote patient monitoring program** by her cardiologist. The program included:

- A **Bluetooth-enabled blood pressure cuff**
- A **glucose monitor** that syncs with a mobile app
- A **daily symptom tracker** via a digital health platform
- **Weekly virtual check-ins** with a nurse

Challenges Faced

Practical training

1. Digital Confusion

- She couldn't distinguish between the app icons on her phone.
- The app interface was in English, with medical jargon she didn't understand.
- She often forgot to charge the devices or turn on Bluetooth.

2. Health Literacy Barriers

- She didn't understand why daily readings were important if she "felt fine."
- She skipped symptom tracking, believing it was only necessary when she felt sick.
- She misinterpreted glucose readings and adjusted her insulin dose without consulting her doctor.

3. Emotional Resistance

- She felt embarrassed asking her sister for help repeatedly.
- She feared being judged during virtual check-ins and often canceled them.
- She believed technology was "for young people" and felt overwhelmed.

Consequences

- Missed critical signs of fluid retention and rising blood pressure.
- Experienced a **heart failure exacerbation** that led to emergency hospitalization.
- Her care team realized she hadn't submitted any data for over two weeks.

Lessons & Opportunities

This scenario highlights the need for:

- **Culturally and linguistically appropriate tech interfaces**
- **Voice-guided instructions** in Sinhala
- **In-person onboarding** for digital tools
- **Family or community support integration**
- **Simplified dashboards** with visual cues (e.g., green/yellow/red zones)

Part Three

Hours	Topics	Activities
2	Collaboration with other healthcare professionals and ethical principles	Interprofessional Case Discussion (30 min): Provide a complex case study of an older adult with multiple comorbidities and low health/digital health Patient Cases literacy. In groups, students identify which other healthcare professionals would be involved and how they would collaborate to improve the patient's literacy. Ethical Dilemma Discussion (30 min): Present ethical dilemmas related to digital health in older adults (e.g., pressure to use a digital tool, data sharing concerns, access disparities).

		Students discuss the ethical principles at play and propose solutions.
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Sample scenario:

Complex Case Study: Mr. Ramesh Perera

Patient Profile

- **Name:** Mr. Ramesh Perera
- **Age:** 76
- **Gender:** Male
- **Location:** Suburban Colombo, Sri Lanka
- **Living Situation:** Lives alone; widowed; adult children live abroad
- **Education:** Completed primary school
- **Occupation (retired):** Former bus conductor
- **Language:** Sinhala (limited English proficiency)
- **Income:** Low, reliant on government pension

Medical History & Comorbidities

Mr. Perera presents with the following chronic conditions:

- **Type 2 Diabetes Mellitus** (diagnosed 15 years ago)
- **Hypertension**
- **Chronic Obstructive Pulmonary Disease (COPD)**
- **Osteoarthritis (knees and lower back)**
- **Early-stage Chronic Kidney Disease**
- **Mild Cognitive Impairment (undiagnosed but suspected)**

Health Literacy Challenges

- Struggles to understand medication instructions, especially when written in English.
- Confuses dosage timings and skips medications when he feels “normal.”
- Believes traditional remedies are more effective than prescribed treatments.
- Rarely asks questions during clinic visits due to fear of “bothering the doctor.”

Digital Health Literacy Challenges

- Owns a basic smartphone gifted by his son but only uses it for calls.
- Unable to navigate health apps or telemedicine platforms.
- Missed multiple virtual appointments during the COVID-19 pandemic.
- Receives SMS reminders for medications but cannot read or interpret them.

Psychosocial Factors

- Experiences loneliness and mild depression, especially after his wife’s passing.
- Reluctant to join community health programs due to mobility issues and pride.
- Distrusts digital health tools, fearing scams or “machine errors.”
- Has a neighbor who occasionally helps with errands but is not medically trained.

Recent Clinical Encounter

Mr. Perera was admitted to a local hospital with:

- **Acute exacerbation of COPD**
- **Uncontrolled blood sugar levels**
- **Elevated blood pressure**

During hospitalization:

- Nurses noted poor medication adherence.
- He was unable to explain his medication regimen or recent symptoms.
- Discharge instructions were provided in English and not fully understood.

Key Challenges for Care Team

- **Medication reconciliation:** Multiple prescriptions from different clinics.
- **Communication barriers:** Language, cognition, and digital limitations.
- **Care coordination:** No caregiver or family nearby to assist.
- **Follow-up:** Missed appointments and lack of engagement with health services.

Potential Interventions

- Use of **visual aids and Sinhala-language materials** for education.
- Enrollment in a **community health worker program** for home visits.
- Introduction of a **voice-based reminder system** for medications.
- Training sessions on **basic smartphone use** tailored for older adults.
- Collaboration with local **Ayurvedic practitioners** to bridge trust gaps.
- Regular **telephonic check-ins** by a nurse or social worker.