

Briefing Note:

Improving nursing performance for in-patient departments at Cambodian public hospitals through an improved nursing shift arrangement



“This Briefing Note of the National Institute of Public Health (NIPH) is developed in collaboration with the Knowledge to Policy (K2P) Center, a WHO-Collaborating Center for Evidence-Informed Policy and Practice”

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Merit Review

This Briefing Note undergoes a merit review process. Reviewers assess the brief based on merit review guidelines.

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Key Message

Problem

The 24-hour nursing shift arrangement at public hospitals in Cambodia has been in place for a significant time and was introduced following the re-opening of hospital services delivery in 1980 after the fall of the Pol Pot regime. This long-standing shift arrangement has been reported to have adverse consequences on staff nurses' quality of life, capacity improvement, mental health (e.g. stress, anxiety, exhaustion), medication errors and quality of nursing care.

Size of problem

- The 24-hour working time shift at hospital resulted in limited energy, exhaustion and reduced attention span for human beings. Stress burden and other potential health disorders are identified among nurses who worked for the 24-hour work shift.
- The 24-hour work shift for nursing staff was correlated to poor quality of care and high risk to the safety of patients.
- Long working hours results in both mental and physical fatigue which adversely affects the general health of staff nurses.

Underlying causes

- There is currently no policy for work shift arrangements for nurses and other medical staff to ensure quality and safety of health care to patients.
- There is an on-going shortage of nurses in the hospital setting requiring continual re-arrangement and rotation of nurses to meet the undesirable 24-hour work shift arrangement and endeavor to meet the quality and safe health care for patients.
- The public hospitals need to improve health service delivery for satisfying patients' needs in order to increase number of access to the hospital services. Poor accessibility at the public hospital is resulted low income for hospital and lead to lower intensive for staff that have correlation with low staff motivation at the public hospitals.

- Nurse would struggle to comply with the 24/7 care operation policy such as Code of Ethics, and the available nursing staff, especially working at the in-patient departments (IPD), emergency (ER), and intensive care unit (ICU), would be overwhelmed to fill the gaps (with frequent rostering of being 24 hours on duty).
- Noticeable, limited knowledge among nurses' leaders to set and making staffing plan for ensuring the quality and safety for patient and staff.

Policy Recommendations

- **Recommendation:** Revise a 24-hour working shift to 8-12 h on duty for nurses at the main IPD services of the public hospitals.
 - **Strategy 1:** Political support from MoH to issue national guideline on nursing shift arrangement between 8-12h at public hospital at CPA3 level or higher.
 - **Strategy 2:** Pilot this proposed recommendation at the main services including Emergency or Intensive Care Unit, In-Patient Departments, and maternity ward which demand seriously continuum of nursing care.
 - **Strategy 3:** Enhance the skill of leadership and management among nurse leaders/managers by providing capacity building and nursing empowerment and job satisfaction including staffing plan, budgeting plan, problem-solving skill and concepts of skill-mixes through strong support and commitment from hospital directors.

សារគន្លឹះ

បញ្ហា

ការអនុវត្តដែលរៀបចំជាជំហានថែទាំជំងឺ២៤ម៉ោងក្នុង១ជំហានយោងនៅតាមមន្ទីរពេទ្យសាធារណៈ នៅប្រទេសកម្ពុជាបានអនុវត្តជាយូរណាស់មកហើយ ចាប់តាំងមន្ទីរពេទ្យបើកដំណើរការផ្តល់សេវាឡើងវិញនៅឆ្នាំ១៩៨០ បន្ទាប់ពីរបប ប៉ុលពត។ ការអនុវត្តបែបនេះត្រូវបានគេរាយការណ៍ថា មានផលប៉ះពាល់ជាអវិជ្ជមាន ដែលជាផលវិបាកទៅលើគុណភាពជីវិតរបស់បុគ្គលិកគិលានុបដ្ឋាក.យិកា ដូចជាការមិនមានពេលវេលាសម្រាប់អភិវឌ្ឍសមត្ថភាព កើនឡើងភាពតានតឹង ការថប់បារម្ភ អស់កម្លាំង នាំឲ្យកំហុសឆ្គងក្នុងការផ្តល់ថ្នាំទៅអ្នកជំងឺ និងជាលទ្ធផលដែលធ្វើឲ្យគុណភាពនៃការថែទាំចុះខ្សោយ។

ទំហំនៃបញ្ហា

- ជំងឺធ្វើការ២៤ម៉ោងក្នុងមួយជំហាននៅមន្ទីរពេទ្យ គឺធ្វើឲ្យមនុស្សថយថយថាមពល អស់កម្លាំង ល្អិតល្អៃ និង ថយចុះការតាំងស្មារតីលើការងារ។ បន្ទុកនៃភាពតានតឹង និងបញ្ហាជំងឺចម្បងផ្សេងទៀត ត្រូវបានរកឃើញកើតឡើងក្នុងចំណោមគិលានុបដ្ឋាក.យិកាដែលធ្វើការ២៤ម៉ោងក្នុងមួយជំហាន។
- ជំងឺធ្វើការ២៤ម៉ោងសម្រាប់បុគ្គលិកគិលានុបដ្ឋាក.យិកា គឺជាប់ទាក់ទងទៅនឹងការថយចុះគុណភាពនៃការថែទាំ និងការប្រឈមខ្ពស់ចំពោះសុវត្ថិភាពរបស់អ្នកជំងឺ។
- ធ្វើការយូរម៉ោង គឺប៉ះពាល់ទាំងសុខភាពផ្លូវកាយ និង ផ្លូវចិត្តដល់គិលានុបដ្ឋាក.យិកា។

កត្តាពាក់ព័ន្ធ

- បច្ចុប្បន្នមិនទាន់មានគោលនយោបាយនៃការរៀបចំប្តូរជំងឺធ្វើការសម្រាប់គិលានុបដ្ឋាក.យិកា និងបុគ្គលិកពេទ្យផ្សេងទៀតនៅឡើយនោះទេ ដើម្បីធានាបាននូវគុណភាព និងសុវត្ថិភាពសម្រាប់ការផ្តល់ជូនសេវាសុខភាពដល់អ្នកជំងឺ។
- មានការខ្វះខាតរហូតមកនូវចំនួនគិលានុបដ្ឋាក.យិកាតាមតម្រូវការកំណត់របស់មន្ទីរពេទ្យសាធារណៈឲ្យត្រូវនឹងការរៀបចំដំណើរការសេវា២៤ម៉ោងប្រកបដោយគុណភាព និងសុវត្ថិភាពសម្រាប់អ្នកជំងឺ។
- មន្ទីរពេទ្យសាធារណៈចាំបាច់ត្រូវកែលម្អការផ្តល់សេវាសុខភាពសម្រាប់បំពេញតម្រូវការរបស់អ្នកជំងឺ ដើម្បីបង្កើនចំនួននៃការមកទទួលសេវាមន្ទីរពេទ្យ។ ការមកប្រើប្រាស់សេវានៅមន្ទីរពេទ្យសាធារណៈមានចំនួនតិច បណ្តាលឱ្យប្រាក់ចំណូលសម្រាប់មន្ទីរពេទ្យចុះទាប នាំឲ្យសេវា

ហិរញ្ញប្បទានសម្រាប់បុគ្គលិកធ្លាក់ចុះ ដែលជាប់ទាក់ទងទៅនឹងការថយចុះការលើកទឹកចិត្តបុគ្គលិក។

- គិលានុបដ្ឋាក.យីកាមានការលំបាកក្នុងការអនុវត្តតាមគោលការណ៍ប្រតិបត្តិក្នុងការផ្តល់សេវាថែទាំសុខភាពឲ្យសកម្មក្នុង២៤/៧ ដូចជាក្រមសីលធម៌ ហើយបុគ្គលិកគិលានុបដ្ឋាក.យីកាដែលធ្វើការមានចំនួនតិច ជាពិសេសនៅផ្នែកជំងឺសម្រាកពេទ្យ (IPD) ផ្នែកសង្គ្រោះបន្ទាន់ (ER) និង ផ្នែកជំងឺធ្ងន់ (ICU) ដែលធ្វើការច្រើនហួសលើសលប់ដើម្បីបំពេញការខ្វះខាតនេះ (ប្តូរវេនគ្នាញឹកញាប់យាម២៤ម៉ោងប្តូរវេនគ្នា)។
- ចំណេះដឹងរបស់គិលានុបដ្ឋាក.យីកាជាអ្នកដឹកនាំនៅមានកម្រិតក្នុងការកំណត់ និងបង្កើតផែនការបុគ្គលិកដើម្បីធានាបាននូវគុណភាព និងសុវត្ថិភាពសម្រាប់អ្នកជំងឺ និងបុគ្គលិក។

អនុសាសន៍គោលនយោបាយ

- **អនុសាសន៍៖** រៀបចំឡើងវិញនូវការប្តូរវេន ពី២៤ម៉ោងក្នុង១វេន ទៅជា ៨- ១២ ម៉ោង តាមវេនសម្រាប់គិលានុបដ្ឋាក.យីកា នៅផ្នែកសំខាន់ៗនៃផ្នែកជំងឺសម្រាកពេទ្យនៃមន្ទីរពេទ្យសាធារណៈ។
 - **យុទ្ធសាស្ត្រទី១៖** ការគាំទ្រពីក្រសួងសុខាភិបាល ក្នុងការចេញគោលការណ៍ណែនាំថ្នាក់ជាតិស្តីពីការរៀបចំប្តូរវេនគិលានុបដ្ឋាក ចន្លោះពី ៨-១២ ម៉ោងនៅមន្ទីរពេទ្យសាធារណៈចាប់កម្រិត CPA3 ឡើង។
 - **យុទ្ធសាស្ត្រទី២៖** សាកល្បងអនុវត្តតាមអនុសាសន៍គោលនយោបាយនេះ នៅតាមផ្នែកសំខាន់ៗនៃផ្នែកជំងឺសម្រាកពេទ្យរួមមាន ផ្នែកសង្គ្រោះបន្ទាន់ ឬ ផ្នែកជំងឺធ្ងន់ ផ្នែកសម្ព័ន្ធ ដែលទាមទារការថែទាំយ៉ាងធ្ងន់ជាប់បន្ត។
 - **យុទ្ធសាស្ត្រទី៣៖** ពង្រឹងជំនាញភាពជាអ្នកដឹកនាំ និងគ្រប់គ្រងដល់អ្នកដឹកនាំ/អ្នកគ្រប់គ្រងគិលានុបដ្ឋាក.យីកា ដោយផ្តល់នូវការកសាងសមត្ថភាព និងការផ្តល់សិទ្ធិអំណាចការថែទាំ និងការពេញចិត្តការងារ រួមទាំងជំនាញធ្វើផែនការបុគ្គលិក ផែនការថវិកា ជំនាញដោះស្រាយបញ្ហានិងគោលគំនិតនៃការលាយចម្រុះគ្រប់ជំនាញ តាមរយៈការគាំទ្រនិងការប្តេជ្ញាចិត្តយ៉ាងមុតមាំពីនាយកមន្ទីរពេទ្យ។

Executive Summary

Purpose

The purpose of this briefing note is to propose policy recommendations necessary to improve the quality of nursing care through amending shift arrangement for nurses a 24 - hour work shift to an 8-hour work shift arrangement that aims to apply specifically in the In-patient departments in all public hospitals in Cambodia.

Problem

The 24-hour nursing shift arrangement at public hospitals in Cambodia has been applied for a significant time and was introduced following the re-opening of hospital services delivery in 1980 after the fall of the Pol Pot regime. This longstanding shift arrangement has been reported to have negatively impacted upon staff nurses' capacity and capability to provide quality nursing care as well as their quality of life, no time for capacity improvement, personal and professional stress, anxiety, exhaustion, medication errors and resulting poor quality of nursing care.

Size of problem

- The 24-hour work shift in a hospital results in is limited energy, exhaustion and reduced attention span for human beings.
- The 24-hour work shift for the nursing staff was correlated to poor quality of care and high risk to unsafety for patients.
- Long working hours results in both mental and physical fatigue which adversely affects the general health of staff nurses.
- Stress burden and other potential health disorders are identified among nurses who experienced work for the 24-hour work shift.

Underlying causes

- The Ministry of Health has adopted Sub-Decree No. 193 on the assignment of health management function and health service delivery to the capital and province

administration. This sub-decree requires the management of health service delivery in the hospital to be 24/7 and thereby this requires hospital staff to be capable of full attention and energy to effectively function at work. There is currently no policy for the working shift arrangement for nurses and other medical staff to ensure the quality and safety of health care to be provided to patients.

- Public hospitals currently experiencing a shortage of nurses would need the policy to include recommendation/s to re-arrange and rotate nursing staff to enable a feasible implementation approach to improve the quality of the nurses' work performance and facilitate the quality and safety of patient care.
- The Ministry of Health approved the Strategic Plan to improve the quality of health service delivery to match with demands and needs of consumers in order to increase access by patients to public hospitals. Poor access to a public hospital has resulted in low remuneration for nurses and subsequently, no staff incentive. Inadequate salary has been reported to have correlation with low staff motivation at the public hospitals.
- Nurses would be unable to readily comply with the 24/7 care requirements such as the Cambodian Council of Nurses' Code of Ethics, and available nursing staff, especially those working in the In-Patient Department (IPD), Emergency Room (ER), and Intensive Care Unit (ICU), would be overwhelmed in trying to fill the nurse staffing gaps (with frequent rostering of being 24 hours on duty).
- Staff nurses perceive that hospital services are needed during day time only, they think night time duty is only permanent stay at hospital as a guard.
- There appears to be a noticeable absence of new ideas and limited knowledge among nurse' leaders to set and design a nurse staffing plan that ensures the quality and safety for both patients and nursing staff.

Policy Recommendations

- **Recommendation:** Revise a 24-hour working shift to 8-12 hour on duty for nurses at the main IPD services of the public hospitals.
 - **Strategy 1:** Political support from MoH to issue national guideline on nursing shift arrangement between 8-12h at public hospital from CPA3 level and higher.

- **Strategy 2:** Pilot this proposed recommendation at the main services including Emergency or Intensive Care Unit, In-Patient Departments, and maternity ward which demand seriously continuum of nursing care.
- **Strategy 3:** Enhance the skill of leadership and management among nurse leaders/managers by providing capacity building and nursing empowerment and job satisfaction including staffing plan, budgeting plan, problem-solving skill and concepts of skill-mixes through strong support and commitment from hospital directors.

សេចក្តីសង្ខេប

គោលបំណង

គោលបំណងនៃឯកសារសង្ខេបនេះ គឺដើម្បីលើកសំណើរជាអនុសាសន៍គោលនយោបាយ ចាំបាច់ក្នុងការលើកកម្ពស់គុណភាពនៃការថែទាំ តាមរយៈការរៀបចំវេនធ្វើការងារសម្រាប់ គិលានុបដ្ឋាក.យិកា ២៤ម៉ោងក្នុងមួយវេន ទៅជា ៨-១២ម៉ោងក្នុងមួយវេន ក្នុងគោលបំណង ដើម្បីដាក់អនុវត្តជាពិសេសនៅក្នុងផ្នែកសំខាន់ៗនៃផ្នែកជំងឺសម្រាកពេទ្យ នៅតាមមន្ទីរពេទ្យ នានាក្នុងព្រះរាជាណាចក្រកម្ពុជា។

បញ្ហា

ការអនុវត្តដែលរៀបចំជាវេនថែទាំជំងឺ២៤ម៉ោងក្នុង១វេនយាមនៅតាមមន្ទីរពេទ្យសាធារណៈ នៅប្រទេសកម្ពុជាបានអនុវត្តយូរណាស់មកហើយ ចាប់តាំងមន្ទីរពេទ្យបើកដំណើរការផ្តល់ សេវាឡើងវិញនៅឆ្នាំ១៩៨០ បន្ទាប់ពីការដួលរលំនៃរបបប៉ុលពត។ ការអនុវត្តបែបនេះត្រូវបាន គេរាយការណ៍ថា មានផលប៉ះពាល់ជាអវិជ្ជមាន ដែលជាផលវិបាកទៅលើគុណភាពជីវិតរបស់ បុគ្គលិកគិលានុបដ្ឋាក.យិកា ដូចជាការមិនមានពេលវេលាសម្រាប់អភិវឌ្ឍសមត្ថភាព កើន ឡើងភាពតានតឹង ការថប់បារម្ភ អស់កម្លាំង នាំឲ្យកំហុសឆ្គងក្នុងការផ្តល់ថ្នាំទៅអ្នកជំងឺ និងជា លទ្ធផលដែលធ្វើឲ្យគុណភាពនៃការថែទាំចុះខ្សោយ។

ទំហំនៃបញ្ហា

- វេនធ្វើការ២៤ម៉ោងក្នុងមួយវេននៅមន្ទីរពេទ្យ គឺធ្វើឲ្យមនុស្សអស់កម្លាំងល្អិតល្អៃ និង ថយចុះការតាំងស្មារតីលើការងារ។
- វេនធ្វើការ២៤ម៉ោងសម្រាប់បុគ្គលិកគិលានុបដ្ឋាក.យិកា គឺជាប់ទាក់ទងទៅនឹងគុណ ភាពនៃការថែទាំដែលធ្វើឲ្យគ្មានសុវត្ថិភាពចំពោះអ្នកជំងឺ។
- ធ្វើការយូរម៉ោង គឺប៉ះពាល់ទាំងសុខភាពផ្លូវកាយនិងផ្លូវចិត្តដល់គិលានុបដ្ឋាក.យិកា។
- បន្ទុកនៃភាពតានតឹង និងបញ្ហាជំងឺចម្បងផ្សេងទៀត ត្រូវបានរកឃើញកើតឡើងក្នុង ចំណោមគិលានុបដ្ឋាក.យិកាដែលមានបទពិសោធន៍ធ្វើការងារ ២៤ម៉ោងក្នុងមួយវេន។

កត្តាពាក់ព័ន្ធ

- ក្រសួងសុខាភិបាលបានអនុម័តអនុក្រឹត្យលេខ 193 គ្រប់គ្រងមុខងារនៃការផ្តល់សេវា សុខភាព២៤/៧យ៉ាងសកម្មនៅតាមមន្ទីរពេទ្យ ជាហេតុតម្រូវឱ្យបុគ្គលិកមន្ទីរពេទ្យមាន

ថាមពលពេញលេញក្នុងការបំពេញការងារ។ ប៉ុន្តែមកទល់ពេលនេះគឺមិនទាន់មានគោលការណ៍នៃការរៀបចំវេនធ្វើការងារសម្រាប់គិលានុបដ្ឋាក.យិកា និងបុគ្គលិកពេទ្យផ្សេងទៀតនៅឡើយនោះទេ ដើម្បីធានាបាននូវគុណភាព និងសុវត្ថិភាពសម្រាប់ការផ្តល់ជូនសេវាសុខភាពដល់អ្នកជំងឺ។

- មន្ទីរពេទ្យសាធារណៈដែលមានការខ្វះខាតគិលានុបដ្ឋាក.យិកា ត្រូវការគោលនយោបាយជាអនុសាសន៍ ដើម្បីរៀបចំឡើងវិញ និងឆ្លាស់វេនបុគ្គលិកវិលចុះវិលឡើងតាមការអនុវត្តសមស្រប និងអាចធ្វើទៅបាន ដើម្បីបង្កើនគុណភាព និងលើកកម្ពស់សុវត្ថិភាពអ្នកជំងឺ។
- ក្រសួងសុខាភិបាលបានកំណត់ផែនការយុទ្ធសាស្ត្រក្នុងការលើកកម្ពស់គុណភាពនៃការផ្តល់សេវាសុខភាពឲ្យស្របនឹងការចង់បាននិងតម្រូវការរបស់អ្នកប្រើប្រាស់ ដើម្បីបង្កើនចំនួនអ្នកប្រើប្រាស់សេវាសុខភាពនៅតាមមន្ទីរពេទ្យសាធារណៈ។ ការចុះថយនៃចំនួនអ្នកប្រើប្រាស់សេវាសុខភាព នៅតាមមន្ទីរពេទ្យសាធារណៈ នាំឲ្យមានការថយចុះនូវប្រាក់ចំណូលហិរញ្ញប្បទានសម្រាប់លើកទឹកចិត្តបុគ្គលិក។ ការផ្តល់ជូនកម្រៃមិនគ្រប់គ្រាន់ត្រូវបានគេរាយការណ៍ថាមានទំនាក់ទំនងជាមួយនឹងការថយចុះការលើកទឹកចិត្តបុគ្គលិកនៅមន្ទីរពេទ្យសាធារណៈនានា។
- មន្ទីរពេទ្យសាធារណៈដែលមានការខ្វះខាតចំនួនគិលានុបដ្ឋាក.យិកានឹងមានការលំបាកក្នុងការអនុវត្តតាមគោលការណ៍ប្រតិបត្តិការក្នុងការផ្តល់សេវាថែទាំសុខភាពឲ្យសកម្មក្នុង២៤/៧ ហើយបុគ្គលិកគិលានុបដ្ឋាក.យិកាដែលធ្វើការមានចំនួនតិច ជាពិសេសនៅផ្នែកជំងឺសម្រាកពេទ្យ (IPD) ផ្នែកសង្គ្រោះបន្ទាន់ (ER) និង ផ្នែកជំងឺធ្ងន់ (ICU) នឹងធ្វើការច្រើនហួសលើសលប់ដើម្បីបំពេញការខ្វះខាតនេះ (មានឈ្មោះញឹកញាប់យាម២៤ម៉ោងប្តូរវេនគ្នា)។
- ដូចដែលបានជម្រាបជូន បុគ្គលិកគិលានុបដ្ឋាក.យិកាយល់ឃើញថា សេវាមន្ទីរពេទ្យត្រូវការតែពេលថ្ងៃប៉ុណ្ណោះ កាតព្វកិច្ចពេលយប់គឺគ្រាន់តែត្រូវការមានពេទ្យស្នាក់នៅមន្ទីរពេទ្យប្រចាំការប៉ុណ្ណោះ។
- ជាការកត់សម្គាល់ឃើញថា គំនិតនិងចំណេះដឹងនៅមានកម្រិតចំពោះគិលានុបដ្ឋាក.យិកាជាអ្នកដឹកនាំក្នុងការកំណត់ និងបង្កើតផែនការបុគ្គលិកដើម្បីធានាបាននូវគុណភាព និងសុវត្ថិភាពសម្រាប់អ្នកជំងឺ និងបុគ្គលិក។

អនុសាសន៍គោលនយោបាយ

- **អនុសាសន៍៖** រៀបចំឡើងវិញនូវការប្តូរវេន ពី២៤ម៉ោងក្នុង១វេន ទៅជា ៨- ១២ ម៉ោង តាមវេនសម្រាប់គិលានុបដ្ឋាក.យិកា នៅផ្នែកសំខាន់ៗនៃផ្នែកជំងឺសម្រាកពេទ្យនៃមន្ទីរ ពេទ្យសាធារណៈ។
 - **យុទ្ធសាស្ត្រទី១៖** ការគាំទ្រពីក្រសួងសុខាភិបាល ក្នុងការចេញគោលការណ៍ ណែនាំថ្នាក់ជាតិ ស្តីពីការរៀបចំប្តូរវេនគិលានុបដ្ឋាក ចន្លោះពី ៨-១២ ម៉ោងនៅ មន្ទីរពេទ្យសាធារណៈចាប់ពីកម្រិត CPA3 ឡើង។
 - **យុទ្ធសាស្ត្រទី២៖** សាកល្បងអនុវត្តតាមអនុសាសន៍គោលនយោបាយនេះ នៅ តាមផ្នែកសំខាន់ៗនៃផ្នែកជំងឺសម្រាកពេទ្យរួមមាន ផ្នែកសង្គ្រោះបន្ទាន់ ឬ ផ្នែក ជំងឺធ្ងន់ ផ្នែកសម្ព័ន្ធ ដែលទាមទារការថែទាំថែទាំយ៉ាងធ្ងន់ជាប់បន្ត។
 - **យុទ្ធសាស្ត្រទី៣៖** ពង្រឹងជំនាញភាពជាអ្នកដឹកនាំ និងគ្រប់គ្រងដល់អ្នកដឹកនាំ/ អ្នកគ្រប់គ្រងគិលានុបដ្ឋាក.យិកា ដោយផ្តល់នូវការកសាងសមត្ថភាព និងការផ្តល់ សិទ្ធិអំណាចការថែទាំ និងការពេញចិត្តការងារ រួមទាំងជំនាញធ្វើផែនការ បុគ្គលិក ផែនការថវិកា ជំនាញដោះស្រាយបញ្ហា និងគោលគំនិតនៃការលាយ ចម្រុះគ្រប់ជំនាញ តាមរយៈការគាំទ្រនិងការប្តេជ្ញាចិត្តយ៉ាងមុតមាំពីនាយកមន្ទីរ ពេទ្យ។

Briefing Note

I. Purpose

The purpose of this briefing note is to propose policy recommendations necessary to improve the quality and safety of nursing care by addressing the work shift arrangements for nurses from a 24-hour single shift to an 8-12 hour shift arrangement that applies specifically to the in-patient departments in all Cambodian public hospitals. It highlights the significant problems and barriers with the relevant evidence to the current 24-hour work shift arrangement. It also provides contemporary and feasible interventions based on evidence to support the introduction of an 8-12hour work shift arrangement that is cost effective and supports best practice human resource management and improvement for health service delivery in In-Patient Departments of Cambodian public hospitals.

II. Problem

The implementation of the 24-hour work shift arrangement for nurses in public hospitals in Cambodia has been in place for a significant time and was introduced after the fall of Pol Pot regime when the hospital services delivery re-opened in 1980 when there was an extreme

Background to Briefing Note

A Briefing Note quickly and effectively advises policymakers and stakeholders about a pressing public issue by bringing together global research evidence and local evidence.

A Briefing Note is prepared to aid policymakers and other stakeholders in managing urgent public health issues.

A Briefing Note describes priority issues, synthesizes context-specific evidence, and offers recommendations for action.

The preparation of the briefing note involved six steps:

1. Identifying and selecting a relevant topic according to predefined criteria.
2. Conducting a comprehensive search strategy to retrieve national, regional and international evidence.
3. Appraising and synthesizing relevant research evidence.
4. Drafting the Briefing Note in such a way as to present concisely and in accessible language the global and local research evidence to support decision-making.
5. Undergoing merit review.
6. Finalizing the Briefing Note based on the input of merit reviewers.
7. Submitting finalized Briefing Note for translation into Khmer, validating translation and disseminating through policy dialogues and other mechanisms.

shortage of qualified nursing staff. This practice was necessary to ensure that health care delivery in the hospitals is open 24 hours a day and 7 days a week. While appreciating its usefulness at the time, this practice has continued to the present day. Many significant changes have occurred to nursing education, nursing work and the requirements of health care service delivery since the 1980s. Although improvement in healthcare service delivery have achieved in the last two decades, however, nursing service in Cambodia remain under develop, causing no modern standard of care have been applied across referral hospitals in the country. Nursing administration management has been seen very limited. Nurses are rostered to work in shift pattern which 24 hours long shift is currently applied to make sure the healthcare service in hospitals run 24 hours per day and 7 days per week (1). Practicing in such regulation in hospitals among nurses showing the weakness of nursing administrative management and nursing leadership in Cambodia. It is now being reported that the 24 hour work shift arrangement has negative impacts on care quality, patient's safety, nurse's health and nurse satisfaction with work (2) . This situation is of serious concern for the Inpatient Department (IPD), Emergency Room (ER), and Intensive Care Unit (ICU), and Surgical Care Unit where the need for high level nursing assessment, monitoring and time critical nursing interventions of complex patients is essential. Contemporary health care service delivery is constantly changing to meet the new technologies, medications and medical treatments and requires contemporary nursing care. To effectively meet these on-going changes, it is crucial to review the 24-hour work shift arrangement for nurses, ensure the improvement of the safety and quality of health care delivery and promote the health and well-being of nurses.

Size of problem

The 24-hour work shift has been implemented for approximately 40 plus years in the IPD of all public hospitals in Cambodia. This application of shift pattern has become a critical weakness for the delivery nursing services within public hospitals at both the sub-national and national level (1). Nurses working in the IPD, especially, ER, ICU, surgical unit, and neonatal care unit are at even greater risks of working continuous hours that are far too long with nursing work that requires continuous concentration and the responsibility for providing safe, quality nursing care to all patients during this timeframe. Empirical

evidence showed that the 24 hour work shift for the nursing staff was correlated to poor quality of caring, putting patients' safety at risk (3-5). Additionally, stress burden and other potential health disorders are identified among nurses who experienced working for the 24 hour work shift (6).

Despite putting efforts to improve healthcare quality to all healthcare facilities; however, health service quality remains challenges. This requires strong governance and leadership synergizing to financial improvement including development of quality management infrastructure (7). Lack of management capability of nursing managers and nursing management gaps effected negative nursing services in Cambodia (12). This current limitation of nursing services management and leadership correlated to poor quality of care of the healthcare system, leading to healthcare workforce could not be able to competitive in the region. Inevitably, complications will fail the commitment to enhancement of healthcare service quality to achieve the Universal Health Coverage in Cambodia (7).

Base on the last statistic from the ministry of health, there are 102 referral hospitals, including 9 national hospitals in Cambodia by December 2015 (8). It is noticed that quality of health services in Cambodia has improved because of structural and technical quality of public health service improved. However, quality of health services does not necessarily meet the needs and expectations of the population (8). In 2019, total Cambodian population have grown up to 15,552,211 people, sharing in male 48.7% and female 51.3%, according to the National Institute of Statistics website (9). Demographic and economic growth transition demand modern healthcare reforming to ensure that healthcare problems are on-time addressed. Nursing services are main performed by nurse staff and nurse staff work at first frontline of healthcare sector. However, significant values of nurses have been clearly known, but details of nursing services have not been demonstrated and undocumented (10).

In Cambodia, nurses are the largest of the healthcare profession who employed by the ministry sharing about 46 percent among health workers, according to the report of the Kingdom of Cambodia Health System Review 2015 (11). The total number nurses in the nationwide were estimated about 17,306 according to a statistic indicated in the website of

Cambodian Council of Nurses in 2017 (12). However, majorities of nurses have been working in public hospital settings and primary health care services (11). Also, they graduated from association degree of nursing and primary degree of nursing (13). Nurses play a vital role within the healthcare workforce in Cambodia because they are in the frontline of health care delivery and have close contact with patients or clients during their hospitalization. However, there is an ongoing shortage of nurses at both provincial public hospitals and national public hospitals with limited documentation on the workforce details (14). Nurses who have been working in the ER and ICU of public national hospitals complain of being exhausted after being on duty for a 24hour work shift (3). This intense workload has been cited as a common reason for experienced nurses to quit the profession and thereby compound the nursing shortage (15). If nothing is done, the complications resulted from the current practice will impose heavy socio-economic burden to patients, nurses, family, and the nursing service as the whole country because of the poor healthcare quality. Mainly, quality of nursing will be constant, leading to attain low confidentiality even more effort to reach the Sustainable Development Goals by 2030.

Current nursing care situation in Cambodia

Nursing services in Cambodia is not alone in the region. Cambodia can mobilize nursing professionals to work within countries in the Association of Southeast Asian Nations (ASEAN) under the ASEAN Mutual Recognition Arrangement on Nursing Service (16). Currently, numbers of nurses in Cambodia remain low to healthcare professional market demanding. Although the increasing number of nurse staff delivered to public hospitals including the hospital at level complementary package at district, province within the last two decades, however, hospital at district and provincial level remain shortage of nurses are indicated. Public hospital in every level are challenges in nursing shortage and working overtime mandatory is currently practicing that thanks to patient's outcome and negatively affect nurse (23). Experienced of nurse's shortage have been claimed and continued as of present time by public healthcare facilities (27). Nursing education institutions compost of public and private institutions. Collaboration between public and private nursing education institutions effort to supply healthcare human resources to completion of social market demand in Cambodia. Private nursing education institutions included the International

University (IU), University of Puthisastra (UP), Norton University (NU), Chenla Phnom Penh University, Chenla University, Life University, The Asian Institute of Sciences, Kompong Cham University, and Angkor University. Moreover, public nursing education institutions are University of Health Science (UHS), Battambang Regional Training Center, Kompong Cham Regional Training Center, Kompot Regional Training Center, Steung Treng Regional Training Center, and Health Science Institute of RCAF (13).

Health care system provision in Cambodia were structured into integration of health services provision including prevention service, health promotion education, diagnosing, healthcare and management, healthcare rehabilitation where healthcare quality of service, safety, and effectiveness based on national hospitals (the third complementary package activities(CPA3) and advance healthcare specialist), provincial referral hospitals (second or third complementary packages activities (CPA2/3), district referral hospitals (first or second complementary package activities(CPA1/2), and health centers or health post (minimum package activities linked to community work and patient transferring system (17).

The National Law on *Regulation of Health Practitioners* issued on 14 December 2016, explicitly mentions the requirement for the Cambodian Council of Nurses to protect the health and safety of nurses through various mechanisms (18). Reasonable work shift times for nursing staff is not a mechanism addressed in the National Law because it is not a regulatory matter. However, neither is it addressed in any other industrial or administrative law or policy. Therefore, nurses working in the IPD, are required to be on duty and working for 24 hours duration (3). Heavy workloads and exhaustion among the hospital nursing staff after a 24 hour work shift has been significantly reported (3). Nurse Managers working in National hospitals in Cambodia have pointed out the negative impact on family members by their nurse relative after working a 24 hours shift. The nurse may display moodiness and anxiety in the hospital and an aggressive mood when they return to work on a day off. This be high risk and has the potential to create a breakdown or violence within the family unit adversely affecting the children and other members in the affected nurse's family. This study also revealed that there is a negative impact on the quality of parent-child relationship because of daily exhaustion of parents both mother and father (19).

Despite having a Law on Regulation of Health Practitioners issued on 14 December 2016, with explicit mention to protect the health and safety of health care members through various mechanisms, decent working time for nursing staff is not clearly written (2). Therefore, nurses working at the IPD when on a rostering schedule, are required to be on duty for 24 hours long (4). The heavy workload and exhaustion among the hospital nursing staff after the 24 hours on duty have been significantly reported (4). Nurse managers at the national hospital in Cambodia have mentioned about the negative impact on family members related to the bad mood and anxiety of their relative who work on duty of 24 hours shift at the hospital and show aggressive mood when they go back on day off. This can result in high risk of violence on children and other members in their family. The study also revealed that there is a negative impact on the quality of parent-child relationship because of daily exhaustion of parent both mother and father (10). In the sub-decree on code of ethics for nurses, it states: “*nurses shall practice her/his job with compassion, sympathy, good behavior, politeness, correctness and concentration toward patient*” (20). Based on this, nurses would be sanctioned for not complying to the above code of professional ethics by their respective professional council (18). The 24-hour work shift would make it hard for those working in the IPD, ER, and ICU fulfill the code. Studies found that the 24 hour work shift have positively associated with chronic fatigue among health care staff that may lead to lower concentration on their work based on physical exhaustion and tiredness (21).

The Cambodian National Policy of Nursing was developed in 2005 for the purpose of emphasizing nursing philosophy and improving nursing quality and supported the establishment of the nursing unit (22), however, does not address the work shift arrangement for nurses. Currently, there is no guideline or policy that helps to guide a contemporary, safe and uniform approach to the shift work arrangement for nurses, in particular, those working in the IPD of ER, and ICU of the Cambodian public hospitals. Each public hospital operates its own internal work shift arrangement for nurses to meet the continuity of 24/7 health care services, however, is no standardization or alignment to contemporary rostering practices. Through this briefing note, the authors wish to propose the consideration and development of a policy on a work shift arrangement that provides

nursing staff at the IPD in the Cambodian public hospitals with 8-12 hours shift for a single working day.

Underlying causes

Understanding the reasons why nurses are scheduled to provide nursing care for 24 hours long within Cambodia public hospitals is very important because it works closely to promote patient and nurse safety and retain qualified nursing staff (23). Evidence from actual observation and evidence supports from academic study highlighted causation related to application of 24 hours long of nursing arrangement within public hospitals in Cambodia. There are three main causes underlying the implementation of the current 24 hours long shift application in referral hospitals and national hospitals in Cambodia. We identified underlying causal factors that related to government arrangement, health workforce, nursing governance and leadership, and clinical nursing innovation.

Governance arrangement

The Ministry of Health has implemented Sub-Decree No. 193 on the *Assignment of health management function and health service delivery* to the capital and provincial administration to improve the quality of health care service delivery in a safe, effective and equitable manner and bring access to the service closer to citizens and communities for 24/7 health care operation (24). This policy requires public hospitals be open every day for 24 hours, which has to date, required hospital staff to undertake a rostering schedule that has them working on duty for 24 hours. Since the 1990s, the Cambodian healthcare system has been recovering from a two-decade-civil war, and nurses' roles have transitioned from task-oriented roles to more sophisticated professional roles incorporating the nursing process (25). The public hospitals are experiencing a shortage of nurses and struggle to comply with the 24/7 care operation policy. With the limited available nursing staff, especially those nurses working at the IPD, ER, and ICU in Cambodian public hospitals nurse staffing would be overwhelmed and to fill the gap frequent rostering on duty of nurses for 24 hours shifts would be needed.

Despite having seen gradually improvement on healthcare system or nursing education in Cambodia in the last two decades, fundamental concepts, values and belief about contemporary nursing must have been revisited. It is on time to examine on the context of contemporary nursing practice, modernized nursing, and raising standard of care for public referral hospitals in Cambodia. Standard of professionalism of nurses is one of objects to determine and maintaining of healthcare standard for public safety protection, having set up as one of strategic plans 2021-2025 of Cambodian Council of Nurses (CCN) (26). It reflects that nursing sector in Cambodia has been reformed to be more advancement. The policy debate about the current and the future of nursing have been considered on nursing models and fundamental concepts (27).

Health services delivery arrangement

The health service delivery at the public hospitals is mandated to be available for 24 hours seven days. Health care in the IPD, ER, and ICU must be available to patients at all times of the day and night. Being on a continuous alert may add to the drain on both the mental and physical energy of nursing staff and may lead to long-term mental and physical fatigue, as reported in a study conducted by Koy et al.(3). Other studies have shown that inadequate rest periods was positively associated with fatigue among nurses in hospital settings, due to quick return for duty call (28). This issue would be exacerbated in hospitals where there is shortage of nursing staff and staff are recalled to work additional shifts. In a cyclical loop, should more nursing staff quit their job due to overwhelming workload, severe fatigue or the adverse impacts on family life, this issue would intensify. The shortage of nurses is evident in Cambodia as there were only approximately 17,000 nurses providing nursing care for more than 15 million population in 2017 (29). There has been a gradual increase in the number of nurses to nearly 30,000 in 2020 however, this is for all public, private and “Not for Profit” health care services. A recent study in 2019 explored the causal relationships between a registered nurse’s perceptions of care quality and the factors affecting their work in Cambodian public hospitals. It revealed that the important influencing factors on quality of nursing care were work satisfaction and the indirect effect of nurse staffing. The study suggested all relevant health care leaders and policymakers take these key factors into serious consideration in order to improve the quality of nursing

care (30). It is evident that long working hours including 12 hour shifts have significant adverse effects on nurses' well-being, work satisfaction, and retention (i.e. intention to quit their job (31, 32).

Health Workforce

The legal number of work hours in Cambodia is 8 hours per day and 48 hours per week (33), but nurses work longer hour than what was stated in Cambodia's labor law. According to the recent research publication indicated that one among 5 of staff nurse worked more than 48 hours and in average Cambodian nurse worked 49.45 hours per week, and 21.7 percent worked 24 hours on-call (23). Nonetheless, to make sure that having staff working at such extended hours have yet been identified (1). Several shifts work and atypical time arrangements has negative health consequences for nurse personnel and correlated to negative patients safety (34, 35). Nurses play essential role focusing on providing healthcare for individuals, family, patients, and community to maintain optimal health and quality of life.

Nursing Governance and Leadership arrangement

Nursing structure and administrative system is under management of the Department of Hospital of the Ministry of Health. Roles, structures, and guideline of nursing application are detailed in the National Nursing Policy of Cambodia 2005 where leadership, management, and authorities of nursing can be found (36). Nurses can be involved in making decisions and doing research; however, the number of qualified nurses in performing the roles is limited (37). In practice, decision makers in healthcare are mostly medical doctors, making concerns on nurses' well-being, work situation, and job satisfaction inadequately addressed.

Nursing governance and leadership play an important role to ensure the quality of nursing care and patients' safety in healthcare services (38). High quality health services involve provision of right care at the right time in a responsive and customized manner, while minimizing harm and resource waste. Quality health care increases the likelihood of desired health outcomes and is consistent with seven measurable characteristics:

effectiveness, safety, people centeredness, timeliness, equity, integration of care and efficiency (39). The implications for nursing health policies is mandatory in order to invest in increasing the quality and quantity of nursing leaders who can develop and advance regulatory functions. Adapting to that pathway would be overcome nursing professionals challenges (40). Benefit of nursing staff, quality of nursing care, and patients' safety is managed in the field of governance and leadership among standard management team in each hospital. Cambodia must to create its standard of nursing health care service from now on to contribute for better health care services in Cambodia aligned to the efforts of the Ministry of Health to improvement the healthcare and well-being vision by 2030.

Association of South East Asia Nations (ASEAN) integrated it free flow labor workforce among its states' members in 2015. As a results, to inspire the economic growth and regional completion in equal opportunity in nursing labor workforces, Cambodia efforts to improvement the capacity of nursing labor by upgrading degree of nursing from primary nursing training to secondary nursing training and bachelor degree in nursing training in currently (41). Even though efforts in advancement in nursing sector in Cambodia, competency of nursing in governance and leadership under high demand to contributing in health care development.

High requirement in competency of nursing government and leadership among nursing staff in even in junior and senior nurse staff is needed so that cultivating the concept of policy decision making in management team in each hospital. To address the related issues of nursing workplace must be required the strong nursing leaders, otherwise, this challenge will continue among nursing related issues. Work life-home life, work context, work design, and work world are issues of nursing staff facing currently. Therefore, nursing governance and leadership must be needed to improve those problems in Cambodia (42).

Health information system and financial arrangement

A robust health information system is vital in modern healthcare services and a key role for nurses is to maintain accurate and reliable patient records, as indicated in the Ministry of Health's Guideline on *Identifying Roles and Responsibilities of Nurses in 2003* (37). However, nursing reports in practice are still poorly documented primarily due to limited

time for nurses to comprehensively complete these documents. Nurses are the primary care giver to patients during each 24-hour period and therefore, poor documentation poses a serious risk to the continuity of quality, safe patient care to patients.

In 2015, the Cambodian Council of Nurse highlighted poor nursing care quality among government employed nurses (14). Job sharing benefit is one of the reasons. Financial incentives are widely used under performance-based financing schemes since 2009, but their distribution to health workers and contribution to their income are poorly understood. Inadequate payment has been reported to have correlation with low staff motivation (and morale) at the public hospitals (43). With low payment, there were increases of dual practice or secondary jobs (44). Coupled with long working hours, nursing performance will be severely compromised and consequently. patient care is adversely affected.

Nursing Innovation

In the current situation that technology have rapidly changed the world, updating platform of nursing working context in Cambodia might have been went well because even if human resource, lifestyle, social demanding, economic growth, and social context has improved. Furthermore, experiencing long term nursing practices model in daily task among nurse staff in every referral hospital or national hospital in Cambodia must be modernized into the digital revolutionary in the 21st century of the world. Nursing sector in healthcare sector is fundamental professionalism contributing in better healthcare and improve well-being of the population. Medical sector and nursing sector must be promoted in equal opportunity and independent competency around the world. Policies on nursing sector must be on time to be developed to ensure the competency of nurses who graduated from nursing school were equipped in the concepts of exploring the new innovations for improvement caring science in hospitals.

Historically event toward nursing education in Cambodia have not much improvement in competency training. Between 1950 and 2013, nursing education milestones training in arrange of 1 to 3 years in nursing schools (41). It might have been said that the low capacity among nurse staff in hospital unable involve in nursing policy decision making. More importantly, we have seen that at the currently context, mostly of decision makers in the

health care sectors in Cambodia are medical doctors. This might could be nursing modernization is stunting because nursing cares standard could not be promoted and understanding the reality situation of the nursing professional career.

Nursing standard of care have been considered as the modern theories of nursing in the 20th century all over the world. At the meantime, an initially establishing guideline for the standard of nursing care in Cambodia was in 2015 (45). Moreover, the guideline has been seen as significant important in nursing care development in Cambodia because it stated about the explicit roles and responsibilities in the nursing career. However, nursing standard of care in practice have been seen low application among public healthcare facilities in both national level and sub-national level.

Clinical nursing innovation must be open widely opportunity since the nursing education up to clinical nursing application in healthcare facilities. Investment in clinical nursing innovation among nursing staff in every referral hospital contribute for new initiative and improve quality of care in healthcare sector in Cambodia. Since the Khmer Rouge regime overthrown, Cambodian's healthcare sector has gradually progressed and better at the present time. Nonetheless, nursing staff and nursing practice in public referral hospital and national hospital have been minor improved because the habit and the concept of applying nursing care in constant. The 24 hours long shift for standing by in each healthcare facilities are practicing, nursing staff has no right to create the decision in take care patient until medical doctor's permission. Therefore, nursing care professionalism is deemed as small scale contributing for improvement patients' outcome. Nurses in Cambodia have spent time mostly on vital signs taken, intravenous insertion, wound dressing, or give medication to patients, whereas other nursing caring were shared roles with family members whose patients 'relatives (46).

Social perception on nurses

In Cambodia, nurses are still regarded as assistants and expected to be subservient to doctors and their work matters are primarily decided by the doctors who are the heads of departments or directors of hospitals. A study shows that nurses' perception of structural and psychological empowerment can significantly increase flexibility, relaxation, free expression, and support. Managers who increase access to support, information, resources,

and opportunities are likely to increase the quality of nurses' work satisfaction in their workplace (15). Establishing the sky of opportunity to promote nursing care capacity and investment in nursing care research area is very small space. The most importantly, kick off leading the nursing research and development might be a streamline development for improving the nursing care in hospitals leading to provide quality of care for the benefit of patients' safety and advancement in Cambodia health sector.

To enhancement the current 24 hours long shift apply in public hospital in Cambodia, we propose addressing the above-mentioned underlying factors through the following policy recommendations.

III. Policy Recommendations

Nursing shiftwork is foundational to effective operations of inpatient care settings which provide professional nursing care services across a 24-hour a day to vulnerable patients. It is the fact that all Cambodian nurses are rostered on duty in shift patterns that include 24-hour work shifts. A recent study in Cambodia addressed the 24-hour-shift having deleterious impacts on care quality, patients' safety, and nurses' job satisfaction. At least the 12 hour shift is recommended, if the 8 hour shift is not possible (47). Similar to this finding, through the interview among key stakeholders at national level are also strongly supported that to implement 12-hour shift first as 8 hours may hardly to afford for limitation number of nurses. Therefore, in this briefing note, we recommend to enhancement the current 24 hours long shift applying in public referral hospitals as the following:

3.1 Recommendation: [Revise a 24-hour working shift to 8-12 hours on duty for nurses at the main IPD services of the public hospitals.](#)

Many studies and systematic reviews have strongly indicated that, work shift of more than 12 hours is associated with reduced educational activities as the main activity of continuing professional development and fewer opportunities to discuss patient care, more likely to deliver poor quality of nursing care and poor safety to patients with more care undone and tend to make higher rate of errors than those working less than 12 hours (48-50). Another systematic review also addressed the adverse health impact such as musculo-skeletal

disorders, cognitive anxiety, sleep disturbance, and role stress on staff nurses who work in shift longer 12 hour (51). There was also reported that cause to emotional exhaustion and burnout among nurses, leading to increased intention to quit the profession (31). It consistent with study in Cambodia found that 24-hour-shift had deleterious impacts on care quality, patients' safety, and nurses' job satisfaction (47).

These literatures are more likely to support the recommendation as stated in specific finding bellow in table 1.

Table 1: Key finding from single studies and systematic reviews to support recommendation

Study	Authors	Year of publication and country	Key finding
Nurses' shift length and overtime working in 12 European countries: the association with perceived quality of care and patient safety	Griffiths, P., Dall'Ora, C., Simon, M., Ball, J., Lindqvist, R., Rafferty, A. M., ... & Aiken, L. H. (2014)	2014 within 488 hospitals across 12 European countries	The most common shift length was 8 hours or less than which account to 50% (50%, n=15,930) and 32% worked less than 12 hours, while 14% worked 12 to 13 hours and only 1% worked more than 13hours on their shift. This study recommended to be caution in preparing nursing shift for nurses as the result of study reported that nurses who worked from more than 12 hours were more likely to deliver poor quality of nursing care and poor safety to patients with more care undone (50).
12 h shifts and rates of error among nurses: a systematic review.	Clendon, J., & Gibbons, V. (2015)	Japan, Australia, Canada, Europe, United States of America	A systematic review has shown that nurses working for 12 hours or longer for a single shift tend to make higher rate of errors than those working less than 12 hours (52).

<p>The impact of 12-hour shifts on nurses' health, wellbeing, and job satisfaction: A systematic review.</p>	<p>Banakhar, M. (2017)</p>	<p>UK, US, Poland, Saudi Arabia</p>	<p>Another systematic review discovered that nurses working for 12 hours or longer for a single shift were likely to experience adverse health impact such as musculo-skeletal disorders, cognitive anxiety, sleep disturbance, and role stress (51).</p>
<p>Comparison of 12 and 24-hours shift impacts on ICU nursing care, efficiency, safety, and work-life quality</p>	<p>Koy, V., Yunibhand, J., & Turale, S. (2022)</p>	<p>Cambodia</p>	<p>One study in Cambodia found that 24-hour-shift had deleterious impacts on care quality, patients' safety, and nurses' job satisfaction. At least the 12 hour shift is recommended, if the 8 hour shift is not possible (47).</p>
<p>Association of 12 h shifts and nurses' job satisfaction, burnout and intention to leave: findings from a cross-sectional study of 12 European countries.</p>	<p>Dall'Ora, C., Griffiths, P., Ball, J., Simon, M., & Aiken, L. H. (2015)</p>	<p>Belgium, England, Finland, Germany, Greece, Ireland, Netherlands, Norway, Poland, Spain, Switzerland and Sweden.</p>	<p>Working for 12 hours or longer is also likely to cause emotional exhaustion and burnout experience among nurses, leading to increased intention to quit the profession (31).</p>
<p>12-hr shifts in nursing: Do they remove unproductive time and information loss or do they reduce education and discussion opportunities for nurses? A cross-sectional study in 12 European countries</p>	<p>Dall'Ora, C., Griffiths, P., Emmanuel, T., Rafferty, A. M., Ewings, S., RN4CAST Consortium, ... & Schoonhoven, L. (2020)</p>	<p>Belgium, England, Switzerland, Germany, Spain, Finland, Greece, Ireland, The Netherlands, Norway, Poland and Sweden</p>	<p>The study on 12 European countries found that working shifts of 12 hr or more is associated with reduced educational activities and fewer opportunities to discuss patient care, with potential negative consequences for safe and effective care (48).</p>

To Support above recommendation, there is also a strongly support and agreement from stakeholders viewed that 8 hours per day is correct with labor in Cambodia. 12 hours up is too over, people will become stress, poor productive and cannot fulfill demand of clients and patients, and 24h is impossible for providing nursing care as the nursing process. The outcome of working 8h, 12h and 24h is showed different. IPD patients need the hospital service both daytime and nighttime. So, preparing 8h rotation is good for maintaining quality of service fully active within 24h. However, in the current situation of nursing shortage and concerning of staff movement, the flexibility shift pattern roster schedule between 8 – 12 hours is strongly recommended by all stakeholders. Therefore, we propose a rostering schedule of 8 hours per shift (option 1), making explicit three shifts for a single day, as a part of structural or organizational intervention. Another option, if the 8-hour shift is not feasible to apply for current situation, at least 12-hour a shift should be consider (option 2). Or it is possible to modify it to fit with their resources and situation.

Option1: 8 hours shift arrangement

Team	Day 1- 10						Day 11-20						Day 21- 30						Hours / Month
Team 1	0	Day	0	Day	0	Day	0	Day	0	Day	0	Day	0	Day	0	Day	0	Day	176 hours
Team 2	Day	0	Day	0	Day	0	Day	0	Day	0	Day	0	Day	0	Day	0	Day	0	184 hours
Team 3	Day	0	Day	0	Day	0	Day	0	Day	0	Day	0	Day	0	Day	0	Day	0	184 hours
Team 4	0	Day	0	Day	0	Day	0	Day	0	Day	0	Day	0	Day	0	Day	0	Day	176 hours
2 Nurses	Day work	Day work	Day work	Day work	Day work	Day work	Day work	Day work	Day work	Day work	Day work	Day work	Day work	Day work	Day work	Day work	Day work	Day work	176 hours

Note : ■ Day (7am-3pm), ■ Afternoon (3pm-11pm), ■ Night (11pm-7am), 0 = Off , ■ Day work (only on working day) (8am-5pm)

In option 1, we can have only 4 teams of nurses, and the numbers of nurses in each team is according to the ratio of nurse-patient require for that unit or department, but we may need at least 2 nurses working every day on working day from 8am to 5pm because day time is more active service and have a lot of administration work to do.

Option2: 12-hours shift arrangement

Team	Day 1- 10									Day 11-20									Day 21- 30									Hours / Month												
Team 1	0									0										0										0										264 hours
Team 2																																								276 hours
Team 3																																								276 hours
Team 4	0									0										0										0										264 hours

Note :  Day (7am-7pm),  Night (7pm-7am), 0 = Off

In option 2, we can have only 4 teams of nurses, and how many numbers of nurses in each team is according to the ratio of nurse-patient require for that unit or department, but the total working time for each nurse seem too over that need to provide extra payment for them or we can organize them to take 2 days off after night shift, so that the total working hour is similar to the labor law. If we do that, we need to have 2 or 3 nurses working at day time from 8am to 5pm because the service provision during day time is more active so that staffs can manage it efficiently.

In order to achieve this policy recommendation, we proposed three strategies to be in place:

- **Strategy 1:** Political support from MoH to issue national guideline on nursing shift arrangement between 8-12h at public hospital from CPA3 level up.

Trust in the organization was influenced by perceived organizational support and by the informing dimension of the empowering leadership style (64). All national and sub-national level of hospitals in Cambodia were governed by MoH (26), the strongly support form MoH help to effective implementation within the organization. From stakeholders' interview have also addressed that point to follow the MoH guideline to improve that situation. In the Cambodia health system review classified the capacity of hospital with main function of IPD, ICU, Emergency, NCU where need close monitoring in hospital from level CPA 3 and higher (8), therefore, the strong recommendation to implement at hospital with their function capacity from CPA3 and higher.

- **Strategy 2:** Pilot this proposed recommendation at the main services including Emergency or Intensive Care Unit, In-Patient Departments, and maternity ward which demand seriously continuum of nursing care.

While proposing the structural intervention on standardizing the rostering system at the 8-12 hour-shift, individual nurses would benefit from individual-focused interventions including workshops on self-care, massage, yoga, mindfulness and meditation, trainings on stress management skills and communication skills...etc. (53). There should be conducted a pilot study in main service of any hospital CPA3 level and higher to compare the result with other studies for supporting decision making.

- **Strategy 3:** Enhance the skill of leadership and management among nurse leaders/managers by providing capacity building and nursing empowerment and job satisfaction including staffing plan, budgeting plan, problem-solving skill and concepts of skill-mixes through strong support and commitment from hospital directors.

In a study, 55 % of nurse managers felt the greatest barrier to implementation was the lack of policy and supervision around this practice of work shift (54). Studies in Asian countries recommended that nursing managers and administrators needed to carefully review the current rostering system and examine its impact on nurses' well-being, ensuring enough resting time when developing the work schedule (28). A systematic review showed that nurses' job satisfaction was significantly correlated with leadership style. In this modern and challenging environment, leaders in the healthcare services are required not only to promote both competencies on technical and professional aspects but also to enhance staff morale and satisfaction (55). Nurses manager who have leadership and management skills would flexibly arrange the rostering schedule to fit their hospital setting appropriately and overcome challenges related to health services delivery arrangement, health workforce, nursing governance, health information system, and financing arrangement. There was also strong recommendation from our key

stakeholder in group policy decision makers mentioned about train nurse manager and provide authority to work in their position and make decision for nursing management. It is needed for training all managers about leadership and management skill and explain to all directors to understand the quality improvement. Train more leaders in all organization, the leaders will know how to work with the situations of their workplace.

By including all level of leaders to join in activities of hospital development make them feel they are valued and supported and this more likely to increase their commitment staying in their role to achieve their main task as a role model for influencing other staff nurse in committing perform patients care quality (56). Policy implementers also suggested to create and provide the opportunity for nurses to share their understanding and take it in serious discussion for hospital improvement plan. Ignoring their idea and not paying attention in listen their point of view is a kind of demotivation them to actively participation in all activities. There is a large body of literature demonstrating that nurse staffing and skill mix are important factors in ensuring the quality of care for patients in acute care settings and giving nurses a sense of autonomy and ownership of their nursing profession (57). Professional identity development program as well as spiritual intelligence training protocol have been found to effectively improve nurses' job satisfaction (58).

Table 2: Key finding from single studies and systematic reviews to support implementation strategy 3.

Title	Authors	Year of publication and country	Key finding
Workplace empowerment, job satisfaction and job stress among Italian mental	Lautizi, M., Laschinger, H. K., & Ravazzolo, S. (2009)	2009 Italy	- Organizational administration must make every effort to create organizational structures and systems that empower nurses to

health nurses: an exploratory study			practice according to professional standards and optimize the use of their knowledge and expertise (59).
Workplace empowerment and nurses' job satisfaction: a systematic literature review	Cicolini, G., Comparcini, D., & Simonetti, V. (2014)	2014 England	- There is a significant systematic review on the relationship between workplace empowerment and nurses' job satisfaction. Structural empowerment and psychological empowerment could have positive impact on job satisfaction (60). The workplace empowerment could be used as strategies to enhances job satisfaction among the nursing staff, leading to nurse retention and positive organizational and patient outcomes.
Empowering leadership, perceived organizational support, trust, and job burnout for nurses. A study in an Italian general hospital	Bobbio, A., Bellan, M., & Manganelli, A. M. (2012)	2012 Italy	- Empowering leadership was an important predictor of trust in the leader..
Collaboration between hospital physicians and nurses: An integrated literature review	Tang, C. J., Chan, S. W., Zhou, W. T., & Liaw, S. Y. (2013)	2013 databases: CINAHL, PubMed, Wiley Online Library and Scopus from year 2002 to 2012	This review has highlighted important aspects of physician–nurse collaboration with three key themes: - attitudes towards physician–nurse collaboration, where physicians viewed physician–nurse collaboration as less important

			<p>than nurses but rated the quality of collaboration higher than nurses.</p> <ul style="list-style-type: none"> - factors affecting physician–nurse collaboration, including communication, respect and trust, unequal power, understanding professional roles, and task prioritizing. - improvement strategies for physician–nurse collaboration, involving inter-professional education and interdisciplinary ward rounds (61).
Interventions to improve nurses' job satisfaction: A systematic review and meta-analysis	Niskala, J., Kanste, O., Tomietto, M., Miettunen, J., Tuomikoski, A. M., Kyngäs, H., & Mikkonen, K. (2020).	2020 Japan	Healthcare organizations and managers should consider implementing effective interventions to improve nurses' job satisfaction and reduce turnover. The results reported in this study highlight that nurse managers should focus on organizational strategies that will foster the intrinsic motivation of employees. Notably, the spiritual intelligence training protocol and Professional Identity Development Program were found to be effective in improving job satisfaction (62).

Table 3: Implementation considerations for Recommendation in strategy 1 and 2

Level	Barriers	Counterstrategies
Health System	<ul style="list-style-type: none"> - There is no clear policy yet about working time arrangement for nursing care duty. - In the Cambodia national policy of nursing has mentioned the enhancement the nursing care quality but did not clarify the appropriate working time and length of duty arrangement of each shift for nurse to maintain the quality (36). 	<ul style="list-style-type: none"> - Present the pro and con of working arrangement of 2 shift model and single shift model to managerial level. - In the review article have identified the positive and negative impact of time arrangement for working on duty shift that policy decision makers to take as the experience for making decision for implement appropriate policy (32, 52).
Organization	<ul style="list-style-type: none"> - Limited knowledge related to nursing management among nurses' leaders. - In 2003, Cambodia used to run the one year program for nurse manager or chief nurse or midwife but it was discontinued in 2006 without any clear information about the reason (63). From that time, there is lack of information how each health facilities provide management and leadership knowledge for nurses' leader or manager. 	<ul style="list-style-type: none"> - Strengthening capacity of management and leadership among nurse's leaders. - The result from the system review highlighted the leadership styles can improve nurses' job satisfaction, organizational commitment, and intent to stay in their position while simultaneously reducing emotional exhaustion (55).

Perception of nurses	<ul style="list-style-type: none"> - Many nurses don't want to change anything, they just think the current practice is easy to have longer time for day off (47). 	<ul style="list-style-type: none"> - Nurses perception will change due to increasing education. - Nursing in Cambodia is transitioning from a task-oriented role to a professional position that incorporates more critical thinking (25).
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Table 4: Implementation considerations for strategy 3

Level	Barriers	Counterstrategies
Health System	<ul style="list-style-type: none"> - All health facilities get used to with 24 hours single shift for a long history for practice. - The recent finding, nurses in Cambodia work longer hours and over time more than the legal work hours limit by labor law in Cambodia (64). There were reported very exhausted with 24 hours in duty for taking care critical ill patients (3). 	<ul style="list-style-type: none"> - Raise up the strong reason for improving quality of nursing care compare to patient's outcome and patients' satisfaction. - There are some studies finding the relationship between nurse staffing, nurse job satisfaction, nurse practice environment, burnout, and nursing care quality through a consideration of what is meant by perceptions of nursing care quality (47, 65).
Organization	<ul style="list-style-type: none"> - Poor power of nurse managers in the line of authority in decision making in each organization. - Since the establishment of national policy of nursing by 2005, however, the involvement of nurse 	<ul style="list-style-type: none"> - Motivate nurses to involve in every activity for hospital improvement. - Fourteen papers review confirmed the important to assist nurses and midwives to perform new or expanded roles and prepare nurses for inclusive practice in organization

	in leadership management decision still call for promotion (36)	and across sectors to improve health care and outcomes (66).
Profession	<ul style="list-style-type: none"> - Nursing profession is low power and lower value compare to other health profession. - In Cambodia till today, there has been no article neither research, which deals with the nursing empowerment (15). 	<ul style="list-style-type: none"> - Support nurses to involve quality improvement, patient's safety and other clinical development. - The findings indicate that a more complete understanding of what drives desired patient outcomes need to focus on how to empower nurses in clinical practice (67).

Next Steps

Next Steps

The aim of this briefing note is to foster a dialogue with key stakeholders informed by the best available evidence. The intention is not to advocate specific recommendations or close off the discussion. Further actions will flow from the deliberations that the Briefing Note is intended to inform. These may include:

- ✓ Deliberation amongst policymakers and stakeholders regarding the recommendations described in this Briefing Note on amending the nursing shift arrangement and improving nursing retention.

- ✓ Refining the recommendations, for example by incorporating, removing or modifying some components

- ✓ Develop action plans and timelines for the implementation of recommendations.

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