

**Post-Fukushima Radiological Nursing
Education in Japan
放射線看護教育
-原子力事故の教訓を踏まえて-**

The Radiological Nursing Society of Japan

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Radiological Nursing Society(launched 2012)

日本放射線看護学会(2012年設立)

★ Aim: To lead best radiological nursing in normal as well as disaster/emergency situation

目的: 平常時、異常・災害時の放射線看護の知の集積

★ Sendai Forum 2015: 1) Radiological nurses' works during the Fukushima nuclear disaster, 2011.

2) Need for radiation education in nursing

仙台会議2015: 1)福島原発事故での放射線看護活動

2) 看護における放射線教育の必要性

★ Education is key to disaster prevention, preparation, response and recovery 教育が鍵

Radiological Nursing Education

-Major developments-

主な放射線看護教育の進展

1. Radiation emergency medicine for nursing practitioners
実践看護師のための緊急被ばく医療
2. MSN: Radiological Nursing Specialist Course
大学院放射線看護CNSコース
3. BSN(学部)
 - 1) Inclusion of radiation contents in basic nursing curricula
放射線の基本的知識をコアカリに
 - 2) Trainers' training for basic radiological nursing
放射線看護のトレーナーズトレーニング

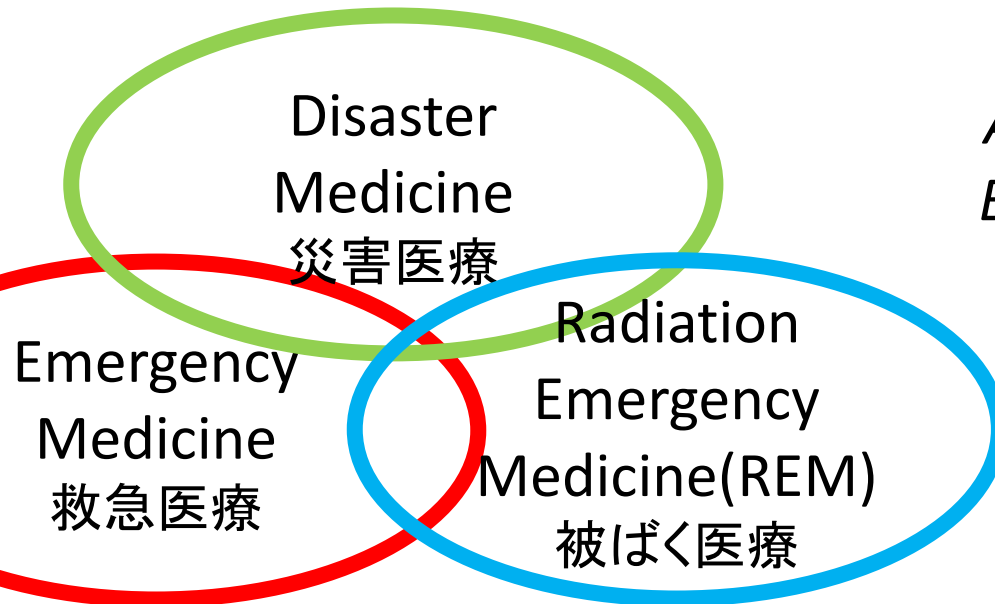
Preparation of Nurses for Nuclear Disasters

看護における原子力災害への備え

1. Radiation Emergency Medicine (REM) education for practice nurses 被ばく医療に従事する実践看護師の教育
2. Nursing leader education in Master program 被ばく医療を担う看護師のリーダー育成のための大学院教育

Radiation Emergency Medicine (REM) for Practice Nurses

実践看護師のための被ばく医療



*Anytime anywhere anyone
Be able to receive the most
appropriate medical
treatment*

いつでも、どこでも、誰でも
最善の医療を
受けることができること

- Training of human resources who are engaged in REM
被ばく医療を担う人材の育成
- Repeated education and training during ordinary times
平時から、繰り返しの教育・訓練
- Practical ability to respond to diverse situations and needs
多様な状況とニーズに対応できる実践力

Nurses' Problems in Radiation Emergency Medicine (REM)

被ばく医療における看護師の課題

- Nuclear disasters are infrequent and rare
原子力災害は低頻度で稀
- Difficulty in practical experience at the clinical site
現場で実践し経験を積むことが難しい
- Insufficient nursing education and continuing education and training on radiation and REM
放射線、被ばく医療に関する看護教育、継続教育が不十分
- Anxiety about the knowledge and skills related to radiation
放射線の知識に不安

REM education is necessary for practice nurses.

看護師には被ばく医療の教育が必要

Hirosaki University Initiated the Advanced Human Resource Development Project for REM in 2008

緊急被ばく医療人材育成プロジェクト

● Nuclear Facilities 原子力関連施設

Oma Nuclear Power Station (under construction) 大間原子力発電所

The Spent fuel Interim Storage Facility
使用済燃料中間貯蔵施設

Higashidori Nuclear Power Station
東通原子力発電所

Nuclear fuel cycle facility
原子燃料サイクル施設

弘前大学
Hirosaki Univ,

Aomori Prefecture



Activities of The Hirosaki University Team after the Fukushima Daiichi Nuclear Power Plant Accident in 2011

福島第一原発事故時の弘前大学の活動

- Activities of the radiation survey team
被ばく状況調査チーム派遣
 - Measurement of radiation exposure 体表面汚染の線量測定
 - Assessment of health condition 健康状態のアセスメント
- 3/15-7/29: 20 teams、365members 20チーム、延べ365名

Measurement of radiation exposure



Radiation Measurement Leads to
the Residents' Relief
被ばく線量測定することで安心を得る

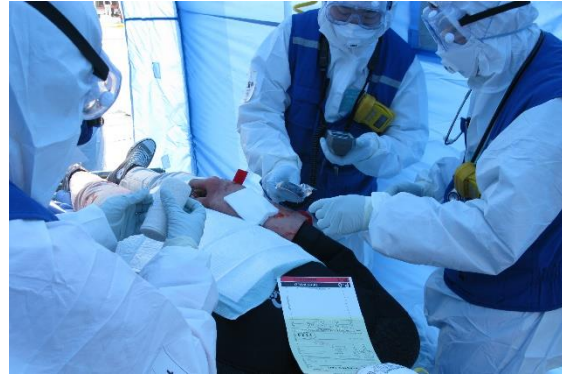
Necessary Points for Nurses Engaged in REM

被ばく医療を担う看護師に必要なこと

2012 REAC/TS (US)



2013 KIRAMS (Korea)



2016 University of Occupational and Environmental Health (Japan)



Repeated learning of REM
繰り返しの学習



Leads to confidence and
improvement of practical skills
自信と実践力を得る

2008~Hiroasaki University



Education of Radiation Emergency Medicine for Working Professionals (nurses and radiological technologists)

現職者 (看護師と診療放射線技師) のため被ばく医療研修

Purpose 目的

- To prepare nurses with required knowledge about REM
- To develop medical professionals who can cooperate, respond and manage radiation emergency situations appropriately and safely. 緊急被ばく医療に必要な知識・技術を習得し、連携・協働しながら適切な対応かつ安全管理ができる医療職者を育成すること。



nurse



Radiological Technologist

nurse

Radiological Nursing Specialist Course (Master's Course)

放射線看護高度看護実践コース

Aims 教育目的

- To do protective measures against radiation exposure of individuals and communities in facilities and regions, based on specialized knowledge and skills regarding radiation exposure and radiation protection.

放射線被ばくや放射線防護に関する高度な専門的知識・技術を基盤とし、施設や地域における個人や集団の放射線被ばく防護対策に従事する。

- To conduct advanced nursing practice for individuals, families and communities with complicated health issues related to radiation exposure.

放射線被ばくに関連した複雑な健康問題を持つ個人、家族、集団に対して、高度看護実践を行う。

Our aim is the creation of Certified Nurse Specialist in Radiological Nursing in the future.
将来、放射線看護専門看護師の誕生を目指しています

Development of the Radiological Nursing Specialist

放射線看護高度実践者の育成

- The residents' health examination 被災者の健診
- Practicum at a nuclear power station 原子力発電所での実習
- Educational role 教育的役割
- Collaboration with DNGL students 災害看護コース学生との連携
- Research 研究活動



Preparation of Nurses in Nuclear Disasters

看護における原子力災害への備え

- Development of nursing practitioners for REM
被ばく医療に従事する実践看護師の育成
 - Repeated, regular education 繰り返し、定期的な教育
 - Simulation training シミュレーション教育
- Development of nursing leaders who are responsible for REM 被ばく医療を担う看護師のリーダー育成
 - Advanced nursing practices 高度な看護実践
 - Coordination with multiple professionals 多職種との連携
 - Consultation 相談
 - Education 教育的役割
 - Research 研究活動
 - Ethics in REM 倫理的配慮

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**Education is key to disaster
prevention, preparation, response,
and recovery!**

Thank you !!