## 要旨

#### 1. 緒 言

世界保健機関によると、世界人口の半数はへき地で暮らしており、医師の24%、看護師の38%がへき地で働いている。へき地の保健医療従事者の不均衡や不足は世界中で報告されており、高所得国でも同様の報告がある。保健医療従事者の深刻な不足により、推定10億人が必要な医療サービスにアクセスできていないと言われている。へき地で働く保健医療従事者のための教育やトレーニング、支援がへき地医療における人材を補充し、地域住民への医療アクセスを改善すると言われているが、へき地医療が抱える課題を完全に解決した国はこれまでにない。

日本のへき地医療の現場でも、看護職員の慢性的な不足および保健医療従事者の高齢化が報告されている。この現状を改善するために、へき地医療拠点病院が都道府県単位で設置されている。へき地医療拠点病院は、へき地診療所等への代診医等の派遣、へき地の保健医療従事者に対する研修、遠隔診療支援等が実施可能である。看護師の派遣も可能になっているが、そのような支援の前提となるへき地診療所看護師の活動の実態が不明であり、へき地医療拠点病院から看護師が派遣されてもへき地診療所での活動が困難であると報告されている。

#### 2. 目 的

へき地診療所看護師の育成を目指すために、研修や教育にて必要となるへき地診療所看 護師のコアとなる活動を検討すること。

#### 3. 研究過程

#### 第1研究

目的:日本のへき地診療所看護師の活動とその内容を抽出すること。

方法:文献検索には、医学中央雑誌 Web 版、CiNii、Google Scholar を用いた。検索語には「へき地診療所」、「へき地」、「看護師」、「日本」を用いた。対象論文は原著論文とし、へき地診療所看護師の活動内容を抽出した。また、抽出された活動について、へき地診療所看護師の活動項目と内容を検討するため 10 年以上のへき地診療所勤務経験のある 7 名の看護師にヒアリング調査を行った。その後、活動の項目と内容を臨床看護に精通した専門家と分析し、類似性に基づいてカテゴリー化した。

結果:へき地診療所看護師の活動は、以下の4カテゴリー『看護基礎実践(10項目)』、『地域理解(4項目)』、『管理と運営(10項目)』、『地域行政との連携(10項目)』からなる36項目が抽出された。

まとめ:本研究の結果、へき地診療所看護師の活動を網羅的に抽出した。これらの結果に基

づき、次の段階として、へき地診療所で実際に行われている看護師の活動の実態と本来必要 であると考えられる活動の重要性の認識を比較することによって、へき地診療所看護師の コアとなる活動を検討することとした。

### 第2研究

**目的:**へき地診療所看護師の活動の実施状況と看護師が認識する重要な活動を明らかにすることにより、へき地診療所看護師の活動の課題を明らかにすること。

方法:自記式質問紙を用いた量的記述的研究とした。対象者はへき地診療所に3年以上勤務する看護師とした。調査内容は、第1研究より抽出された36項目のへき地診療所の看護師の活動の実施の有無を2件法で尋ね、各看護活動の重要度を5段階のリッカート尺度にて調査した。

結果:へき地診療所 1038 箇所のうち研究協力同意の得られた 81 箇所のへき地診療所に所属する 100 名の看護師のうち、本研究の参加者の選定基準を満たした 60 名に研究を依頼した。最終的に 33 箇所、40 部の質問紙を回収した。研究参加者の所属診療所の所在地は北海道~九州・沖縄までの範囲であった。研究参加者の 92.5%は、40 歳代以上であり、へき地診療所勤続年数は、5 年以上の者が 90%を占めた。『看護基礎実践』や『地域理解』に関する活動は、およそ 80%以上の看護師に重要度の高い活動として認識され、かつ実施されていた。『管理と運営』に関しては、5 項目の活動で 80%以上の看護師が実施していた。『地域行政との連携』に関しては、4 項目の活動で 80%以上の看護師が実施していた。

まとめ:へき地診療所における看護師の活動は基本的な看護実践にとどまらず、診療所のある地域を理解することや診療所の管理や運営、地域の行政にも関わり、数多くの多様な活動を行っていた。『管理と運営』、『地域行政との連携』関する活動は、へき地診療所看護師にとって重要であると認識されているが実施されていない活動があった。これらの活動に関しては、へき地診療所看護師の活動の課題となることが示唆された。

### 第3研究

**目的:**へき地診療所看護師の視点からへき地診療所看護師の重要な活動についての意見を 集約し、コアとなる活動を検討すること。

方法: デルファイ法を用いた量的記述的研究とした。3回の質問紙調査を行った。対象者はへき地診療所に3年以上勤務する看護師とした。調査内容は、36項目からなるへき地診療所看護師の活動の重要度を5段階のリッカート尺度にて調査した。36項目以外に実施している活動がある場合、自由記載欄に書いてもらうように依頼した。3回目の調査をもって抽出された活動は、デルファイ法によりコンセンサスが得られたとみなした。コンセンサスを示す同意率(大変重要/重要と回答した割合)は51%で設定した。

結果: へき地診療所 1038 箇所のうち研究協力同意の得られた 81 箇所のへき地診療所に所属する 100 名の看護師のうち、本研究の参加者の選定基準を満たした 60 名に研究を依頼し

た。最終的に33箇所、40部の質問紙を回収した。研究参加者の所属診療所の所在地は北海道~九州・沖縄までの範囲であった。研究参加者の92.5%は、40歳代以上であり、へき地診療所勤続年数は、5年以上の者が90%を占めた。

自由記載から得られた 3 項目を追加し、全 39 項目のへき地診療所看護師の活動のうち 33 項目で、51%以上の同意が得られた。『看護基礎実践』で 13 項目、『地域理解』で 4 項目、『管理と運営』で 9 項目、『地域行政との連携』で 7 項目であった。

同意率が 51%未満の活動は、6 項目あった。『管理と運営』の 3 項目、『地域行政との連携』の 3 項目であった。

まとめ: 33 項目の活動は、へき地診療所看護師にとって重要な活動としてコンセンサスが得られた。コンセンサスの得られなかった活動に関しては、へき地医療拠点病院の意見を収集した上で、へき地診療所看護師のコアとなる活動であるか検討することにした。

### 第4研究

**目的:**へき地医療拠点病院の視点からへき地診療所看護師の重要な活動についての意見を 集約し、コアとなる活動を検討すること。

方法: デルファイ法を用いた量的記述的研究とした。3回の質問紙調査を行った。対象者は、へき地医療拠点病院のへき地診療所連携担当者とした。調査内容は、39項目からなるへき地診療所看護師の活動の重要度を5段階のリッカート尺度にて調査した。3回目の調査をもって抽出された活動は、デルファイ法によりコンセンサスが得られたとみなした。コンセンサスを示す同意率(大変重要/重要と回答した割合)は51%で設定した。

結果:日本のへき地医療拠点病院 296 箇所のうち、21 箇所のへき地医療拠点病院に所属する 21 名のへき地診療所連携担当者が参加した。研究参加者の所属診療所の所在地は北海道~九州・沖縄までの範囲であった。医師が 5 名、看護師が 15 名、事務職が 1 名であった。参加者のうち 8 名は、へき地診療所での勤務経験があった。全 39 項目のへき地診療所看護師の活動のうち 37 項目で、51%以上の同意が得られた。『看護基礎実践』で 13 項目、『地域理解』で 4 項目、『管理と運営』で 10 項目、『地域行政との連携』で 10 項目であった。同意率が 51%未満の活動は、『管理と運営』の 2 項目であった。

まとめ:37 項目の活動は、へき地医療拠点病院の連携担当者にとってへき地診療所看護師の重要な活動としてコンセンサスが得られた。へき地診療所看護師とへき地医療拠点病院の連携担当者の間において、へき地診療所看護師の重要な活動の認識に差のあった活動は4項目あった。それらは診療所看護師の有給休暇取得のための取組や災害時・緊急時の医療体制の整備、虐待の予防に関する活動であった。へき地診療所看護師とへき地医療拠点病院の連携担当者の双方に、へき地診療所看護師の重要な活動としてコンセンサスが得られなかった活動は『管理と運営』に関する「経営・運営管理」と「遠隔医療システムの導入と運用」の2項目であった。

### 4. 結 論

本研究において、第 1 から第 4 研究の結果を踏まえ、へき地診療所看護師のコアとなる活動は『看護基礎実践』、『地域理解』、『管理と運営』、『地域行政との連携』からなる 33 項目であることが明らかになった。

コンセンサスの得られなかった活動については、本研究の結果、現時点では研修の内容としては不必要であるが、将来、へき地医療供給体制の基盤強化等によって、へき地診療所看護師が主体となる活動になる可能性がある。引き続き、これらの活動についての詳細な検討が必要である。

# A Study of Nursing Practice of Clinics in Rural Medicine

### [Introduction]

One half of the global population lives in rural areas, but these areas are served by only 38% of the total nursing workforce and 24% of the total physicians' workforce. Even high-income countries have a shortage of healthcare workers in rural areas. It is said that an estimated 1 billion people do not have access to the necessary healthcare services due to a serious shortage of healthcare workers in the world. Proper education, training and support for healthcare workers in rural areas lead improvement of healthcare services for local residents in rural areas. But no country has ever solved the problems in this field.

It has been reported that it is difficult to secure nursing staff, especially at clinics and hospitals in rural areas in Japan. Another issue is the aging of healthcare workers in rural areas. In order to improve this situation, support hospitals for medical services in rural areas have been set up by prefectures that can provide medical examinations performed by dispatch examiners, training for rural healthcare workers, and telemedicine support. Support hospitals are also capable of dispatching nurses to clinics in rural areas, but the nursing activities that they can perform there have not been reported, and thus, adequate support has not been provided.

# (Objective)

This study aimed to identify core nursing activities in rural clinics to consider the contents of a rural nursing training program.

### Study1

**Objective:** This study aimed to extract nursing activities of rural clinics in Japan.

**Method:** We identified relevant articles using Japan Medical Abstract Society databases, CiNii and Google Scholar with the following keywords: the roles, duties, and activities related to nurses working at clinics in rural areas of Japan. We selected original articles and nursing activities of rural clinics. We collaborated with seven nurses who have worked in rural clinics for over 10 years, making them clinical experts to check these activities and contents by interviewing with phone. After that, we analyzed the contents of activities with nursing specialists familiar with clinical nursing, and categorized them based on similarity.

**Results:** There were 36 nursing activities that were divided into the following four categories: Basic Nursing Practice (10 items), Community Understanding (4 items), Administration and Operation (10 items), and Cooperation with Local Government (10 items).

Conclusions: As results of this study, we have comprehensively extracted the nursing activities in

rural clinics. Based on these results, the next step is to compare the activities that nurses actually performed at the clinics and the recognition of the importance of the activities that are considered to be core.

# Study2

**Objective:** This study aimed to evaluate the status of implementation of nursing activities and identify important activities of rural clinics in Japan to explore the challenges in these activities.

**Methods:** This was a quantitative descriptive study using a paper-based questionnaire. Our purposeful sampling criteria required participants to have a minimum of 3 years' experience as a clinic nurse in rural areas in Japan. Participants rated the level of implementation of each of the 36 activities within four areas of nursing practice, including "Basic Nursing Practice," "Community Understanding," "Administration and Operation," and "Cooperation with Local Government," on a 2-alternative question and their level of importance on a 5-point Likert scale (not at all important = 1, very important = 5).

**Results:** All clinics in rural areas in Japan were targeted. A request regarding cooperation with the research was sent to all 1,038 clinics in rural areas in Japan, and 100 nurses in 81 clinics provided consent for participation in this research. Among the nurses who consented, 60 fulfilled the inclusion criteria. We then sent the questionnaire to them, and finally, 40 nurses working at 33 clinics in rural areas in Japan participated in this study. The 40 participants involved in this study were from all over Japan (Hokkaido to Kyusyu and Okinawa area). Of them, 92.5% (n = 37) were between 40 and 64 years of age. Further, 90% (n = 36) of participants had more than 5 years of employment at the same clinic. The results showed that activities related to "Basic Nursing Practice" and "Community Understanding" were recognized as important and were performed by 80% nurses. Five activities related to "Administration and Operation" and four activities related to "Cooperation with Local Government" were performed by 80% nurses.

**Conclusions:** Activities related to "Basic Nursing Practice" and "Community Understanding" were recognized as important and carried out by almost all the nurses in this study. Some activities related to "Administration and Operation" and "Cooperation with Local Government" were recognized as important but not implemented. These activities might be challenges in nursing activities in rural clinics.

# Study3

**Objective:** This study aimed to identify the important nursing activities of clinics in rural areas of Japan.

**Methods:** The Delphi method was used for this quantitative descriptive study. Our purposeful sampling criteria required participants to have a minimum of 3 years' experience as a clinic nurse in

rural areas in Japan. Participants rated the level of importance of each of the 36 activities. Thirty-six items within four areas of nursing practice, including "Basic Nursing Practice," "Community Understanding," "Administration and Operation," and "Cooperation with Local Government," on their level of importance on a 5-point Likert scale (not at all important = 1, very important = 5). We also provided a space for free comments and requested that participants add any nursing activities practiced in addition to the ones included in the survey items. An established consensus was defined by 51% agreement on the third survey results referred to by previous Delphi studies.

**Results:** All clinics in rural areas in Japan were targeted. A request regarding cooperation with the research was sent to all 1,038 clinics in rural areas in Japan, and 100 nurses in 81 clinics provided consent for participation in this research. Among the nurses who consented, 60 fulfilled the inclusion criteria. We then sent the questionnaire to them, and finally, 40 nurses working at 33 clinics in rural areas in Japan participated in this study. The 40 participants involved in this study were from all over Japan (Hokkaido to Kyusyu and Okinawa area). Of them, 92.5% (n = 37) were between 40 and 64 years of age. Further, 90% (n = 36) of participants had more than 5 years of employment at the same clinic. Three activities were added in the free comment space in addition to the 36 survey items. Finally, 39 items were settled as nursing activities in rural clinics in this study. The nurses reached a consensus on 33 activities. These included all of the activities within the categories of "Basic Nursing Practice" and "Community understanding," while half of the "Administration and Operation" and "Cooperation with Local Government" items were recognized as important activities. Six activities were recognized as important by less than 50% of nurses. Six of three activities related to "Administration and Operation" and other three activities related to "Cooperation with Local Government".

**Conclusions:** Thirty-three activities were recognized by the nurses as important. The activities for which consensus could not be reached were collected from the opinions of support hospitals in rural areas, and considered whether were the core activities of rural clinic nurses in next study.

## Study4

**Objective:** This study aimed to investigate and identify the important nursing activities of clinics in rural areas to clarify and prioritize ways of supporting hospitals in rural areas of Japan to explore core nursing activities.

**Methods:** The Delphi method was used to develop and focus the content or this quantitative descriptive study. Our purposeful sampling inclusion criteria required that participants be professionals from support hospitals in charge of working cooperatively with clinics in rural areas. Participants rated the level of importance of each of the 39 activities. Thirty-nine items within four areas of nursing practice, including "Basic Nursing Practice," "Community Understanding," "Administration and Operation," and "Cooperation with Local Government," on their level of importance on a 5-point Likert scale (not at all important = 1, very important = 5). An established

consensus was defined by 51% agreement on the third survey results referred to by previous Delphi studies.

Results: All support hospitals in rural areas in Japan were targeted. A request for cooperation with the research was sent to all 296 support hospitals in rural areas in Japan. Twenty-seven participants from 27 support hospitals responded, and a total of 21 were included for participation. The 21 participants involved in this study were from all over Japan (Hokkaido to Kyusyu and Okinawa area) and comprised 5 medical doctors, 15 nurses, and 1 office workers. The participants reached consensus on 37 of the 39 rated activities. Including all in the categories of "Basic Nursing Practice", "Community Understanding," and "Cooperation with Local Government" and all but two of the "Administration and Operation" items. The ratings for those two items did not meet the 51% required for consensus. Conclusions: Thirty-seven activities were recognized by support hospitals from all the selected rural areas as important activities of clinic nurses. There were four activities that differed recognition of the important activities of rural clinic nurses between the rural clinic nurses and professionals from support hospitals in charge of working cooperatively with clinics in rural areas. Those activities were "adjustment of staff inside and outside the facilities in order to guarantee the use of paid employees," "establishment of home medical support systems for preparation in case of disaster," "consolidation of the role of emergency transportation and coordination with government offices and family members," and "detection, reporting, and prevention of abuse." The activities for which consensus was not reached as important activity of rural clinic nurses for both the nurses and professionals from support hospitals were 2 activities related to "Administration and Operation". Those two were "management and operation of clinics" and "introduction and operation of remote medical system".

### **Conclusions**

Based on the results of the first to fourth studies, 33 activities from four categories were determined to be the core of nurses in rural clinics in Japan. The four categories included "Basic Nursing Practice," "Community Understanding," "Administration and Operation," and "Cooperation with Local Government." As for activities which consensus was not reaches, the contents of training for nurses in rural clinics are unnecessary at this time. In the future, there is a possibility that those activities will be mainly performed by rural clinic nurses by strengthen foundation for rural medicine supply systems. A detailed research of these activities will continuously necessary.