

平成28年度 委託研究開発成果報告書

I. 基本情報

事業名：(日本語) 地球規模保健課題解決推進のための研究事業
(英語) Research Program on the challenges of Global Health issues

研究開発課題名：(日本語) 地球規模モニタリングフレームワークにおける各種指標の検証と科学的根拠にもとづく指標決定プロセスの開発
(英語) Research and development of the process to determine evidence-based indicators and their verification for a global monitoring framework

研究開発担当者(日本語) 国立研究開発法人国立成育医療研究センター政策科学研究部
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実施期間： 平成28年4月1日 ～ 平成29年3月31日

分担研究(日本語) 母子保健の各種指標の検証、系統的レビュー・ガイドラインとの比較
開発課題名：(英語) Evaluation of indicators in maternal and child health and comparison with systematic reviews and guidelines

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分担研究(日本語) 各種指標の国・地域による優先順位の検証
開発課題名：(英語) Are indicators in the national/global survey available in policy planning?

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分担研究	(日本語)	指標決定の標準的方法の開発、研究の取りまとめ
開発課題名：	(英 語)	Standardized method to develop a core set of priority indicators
研究開発分担者	(日本語)	国立研究開発法人国立成育医療研究センター臨床研究開発センター
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分担研究	(日本語)	長期的効果を見据えた母子保健の包括的なアウトカムの医療経済評価研究
開発課題名：	(英 語)	Health economic evaluation research on comprehensive outcomes for long-term effects in maternal and child health
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II. 成果の概要（総括研究報告）

研究開発代表者所属・役職、氏名：国立研究開発法人国立成育医療研究センター政策科学研究部
部長 森 臨太郎

課題名：地球規模モニタリングフレームワークにおける各種指標の検証と科学的根拠にもとづく指標決定プロセスの開発

本研究の目的は、母子保健領域をモデルとして、各種指標の有効性と限界を検討、保健政策の真の目標となる最終アウトカムに直結し、かつ国・地域の状況に即したコア指標を作成することである。また、この過程を、客観的かつ科学的根拠にもとづいた指標決定の標準的方法として策定し、新たに開発した統計学的手法および策定した指標決定のための標準的方法を世界に発信することを目指している。本研究は、下記の5つの分担研究班により実施された。これまでの研究活動を通して、国際誌に40本の論文を出版し、7件の学会発表を行った。

A. 最終アウトカム指標の理論的研究（森）：WHOの健康定義やwell-beingに関する系統的レビューの結果に沿った、より包括的な最終アウトカム指標の方向性を理論的研究によって示すべく、理論構築を進め、指標作成の考え方について整理をした。これらの成果は、さまざまな国際学会などにおける積極的な意見交換と対話から生み出された。

B. 母子保健の各種指標の検証、系統的レビュー・ガイドラインとの比較（大田）：WHOが世界29か国で

実施した地球規模の母子保健データである WHO Multicountry Study on Maternal and Newborn Health

(WHOMCS) の 2 次解析や系統的レビューを実施した。これらの研究成果を踏まえ、WHO と連携し、母子保健領域のガイドラインの作成に貢献した。更に、効果的なガイドラインの作成を進めるため、新たに策定される指標の評価や応用への提言を行った。

C. 各種指標の国・地域による優先順位の検証：母子保健に関係する様々なインディケーターが収集されているが、これらのうち、未活用のデータ、各国固有のデータを探索し、有効に活用しうよう政策提言を創出することを目的に、特にラオス国の LSIS (Lao Social Indicator Survey) の解析・検討を行った。ラオス国保健省下の国立公衆衛生院、WHO ラオス事務所担当者等との検討会議を行い、ラオス政府への政策提言報告書を提出。現地および各国の行政官からの意見聴取を行うなどし、得られた結果を学術誌に投稿した。

D. 指標決定の標準的方法の開発：保健政策の真の目標となる最終アウトカムに直結し、かつ国・地域の状況に即したコア指標を作成すべく、真の目標となる最終アウトカムの施設や国・地域間の優劣に対して、インディケーターとなるような各種プロセスが寄与する割合を、その施設や国・地域ごとに算出し、それぞれの状況に応じて優先すべきインディケーターとする方法を試行した。この方法を用いて、WHO の周産期医療に関する世界規模のデータセットである WHO Global Survey on Maternal and Perinatal Health

(WHOGS) および WHOMCS の統計解析を実施、国ごとにより多くの妊婦および胎児・新生児の予後を改善する可能性が高いと考えられる疾患・介入のリストを作成した。

E. 長期的効果を見据えた母子保健の包括的なアウトカムの医療経済評価研究：世界疾病負担研究 (GBD) に協力して、共著論文を 8 本出版した。日本 (高所得国)、中国 (中所得国)、バングラデシュ (低所得国) を対象国にして、小児肥満を例に成人期以後の疾病負担アウトカムに関わる予測モデルを作成した。

Results of Research and Development (in English)

Principal Investigator: Rintaro Mori, MD, PhD, MSc, FRCPC

Director, Department of Health Policy, National Center for Child Health and Development

Title of Research and Development: Research and development of the process to determine evidence-based indicators and their verification for a global monitoring framework

The aims of the present study were: 1) to evaluate the efficacy and limitation of the current indicators in maternal and child health, and 2) to develop a core set of priority indicators which are closely related to the ultimate outcome and reflect the context of that specific country/area. In addition, we aimed to develop a standardized method which policy makers can use/apply to identify priority outcomes/indicators in their local context. We had five research groups with specific research agendas. Through the present research and development project, we have published 40 papers in international journals and had presentations in 7 conferences.

A. Theoretical study of ultimate outcome indicators: We conducted a theoretical study of ultimate outcome indicators which are more comprehensive than currently available indicators and align with the WHO's definition of health, as well as the results of our systematic review on well-being.

B. Evaluation of indicators in maternal and child health and comparison with systematic reviews and guidelines: We conducted a secondary analysis of the WHO Multicountry Study on Maternal and Newborn Health (WHOMCS), a global maternal and child health survey conducted by the WHO in 29 countries around the world. In addition, we conducted systematic reviews and contributed to the development of the WHO's guidelines.

C. Are indicators in national/global surveys available for policy planning?: Periodical surveys are conducted at a global and national level under the supervision of governments or UN agencies. However, the results are not necessarily utilized properly in policy making. In this research project, we examined the practicability of indicators in maternal and child health in terms of policy implication. We compared two kinds of data: the Lao Social Indicator Survey (LSIS) and a rural survey conducted in 2015. In addition, we conducted interviews with a policy planning officer of the Lao government and a WHO official from the Lao country office. We identified several issues relating to indicators used in the present major surveys. The summary report was submitted to the Lao government for their review.

D. Standardized methods to develop a core set of priority indicators: We developed a new statistical model to identify priority outcomes/indicators that are closely related to the ultimate outcome and reflect the context of that specific country/area. By using this method, we conducted a secondary analysis of WHOMCS and developed a core set of priority diseases/interventions based on the estimated contributions of those diseases/interventions to the performance of each country/area.

E. Health economic evaluation on comprehensive outcomes for long-term effects in maternal and child health: We developed a projected model to predict the long-term outcomes of chronic diseases in adulthood of child obesity in the general populations of Japan, China, and Bangladesh. We also collaborated with a global research project on the Global Burden of Disease (GBD) and published 8 co-authored papers.

III. 成果の外部への発表

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(3) 「国民との科学・技術対話社会」に対する取り組み

該当なし

(4) 特許出願

該当なし