

# A social scientist's view on the human resources management of Japanese nurse: how can we resolve “nurse shortage”?

Hiro Matsushita, Ph.D.

Professor of Health Administration and Health Systems Science

Faculty of Nursing, Tokyo University of Information Sciences

[sparklingmetal@gmail.com](mailto:sparklingmetal@gmail.com)

# Research



Healthcare Systems

Informatics

Health Systems Science

Health and Nursing care Management

Management Science

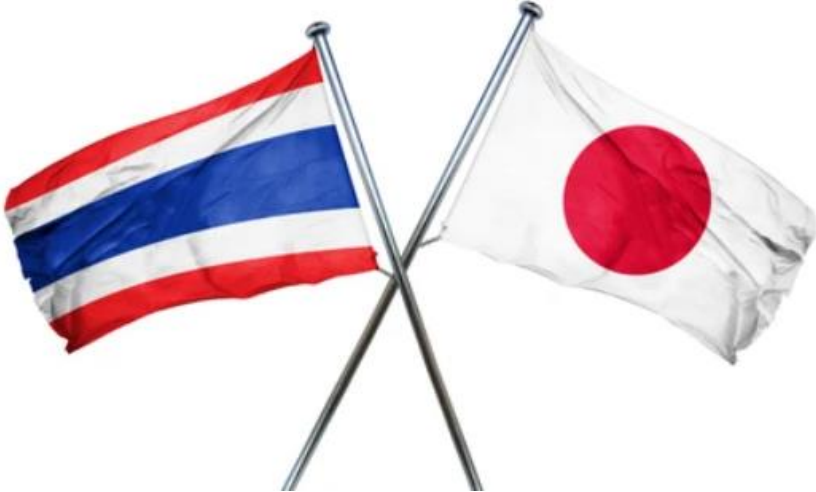
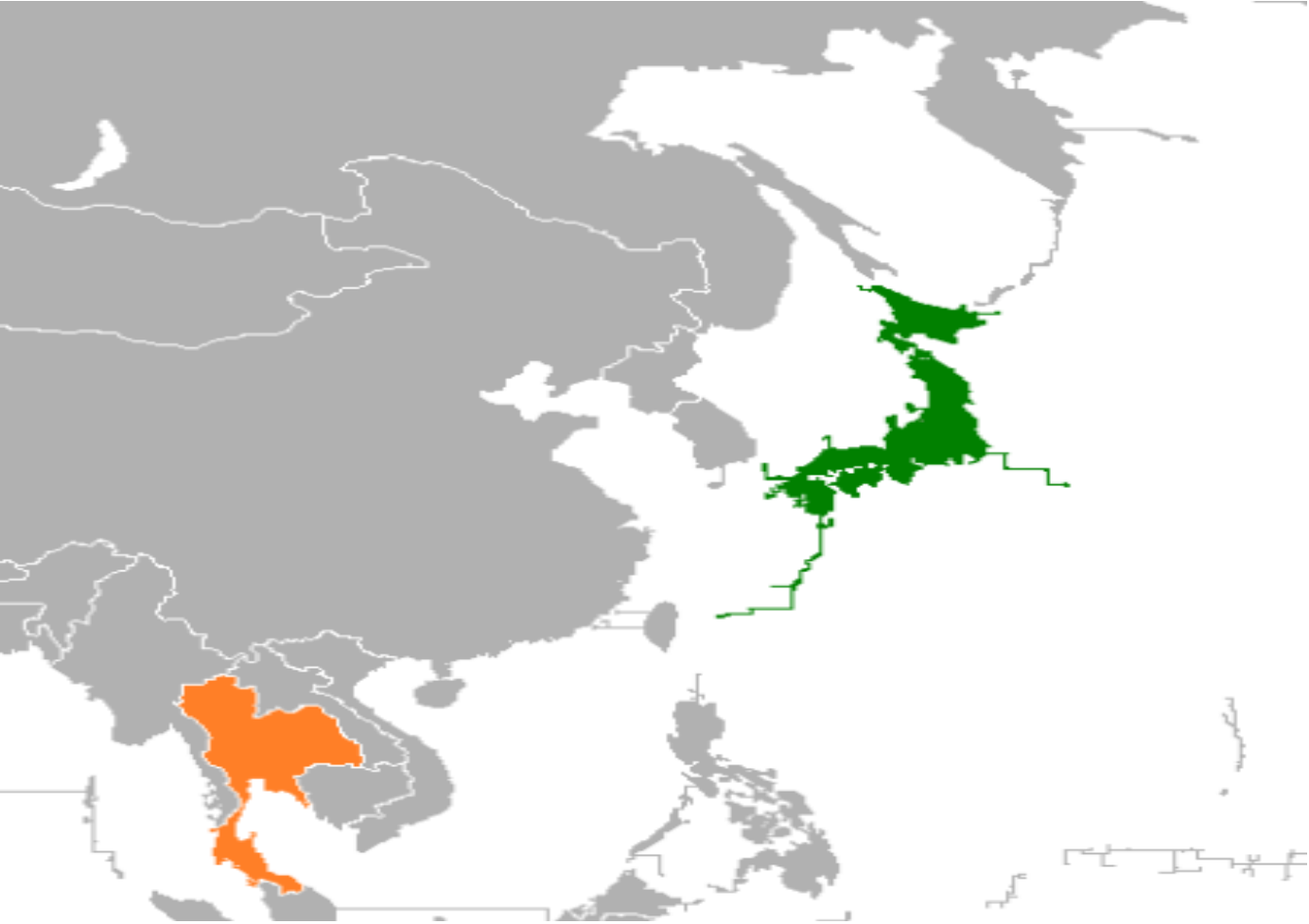
Innovation and Interprofessional Collaboration

Human Resources Management

Policy Analysis

Leadership & Organizational Learning

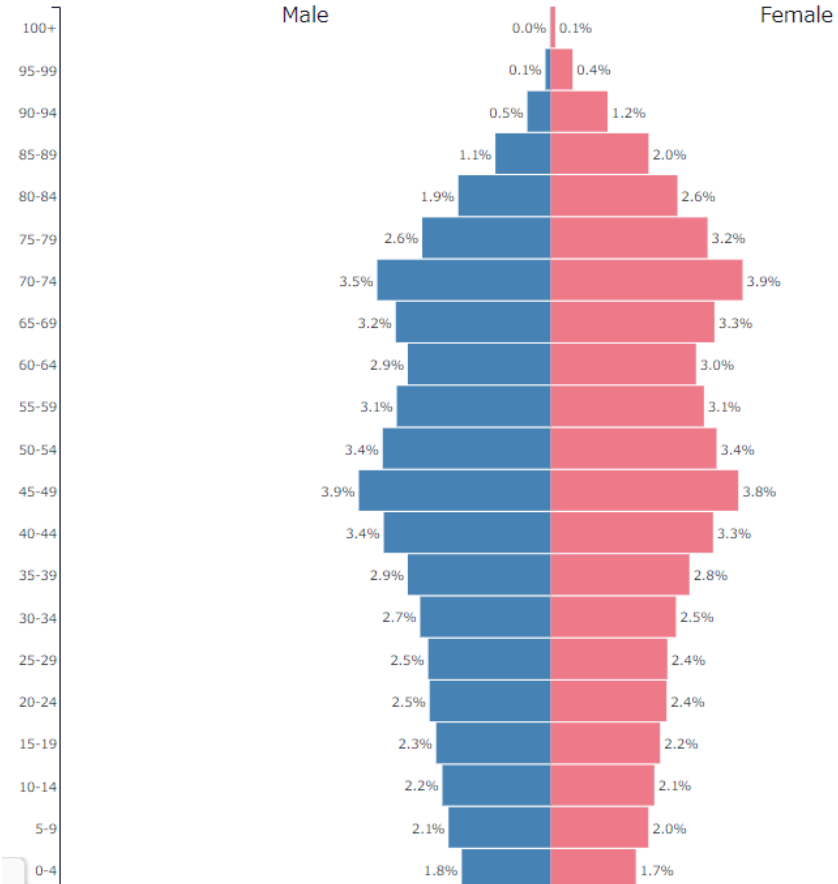
# Thailand and Japan



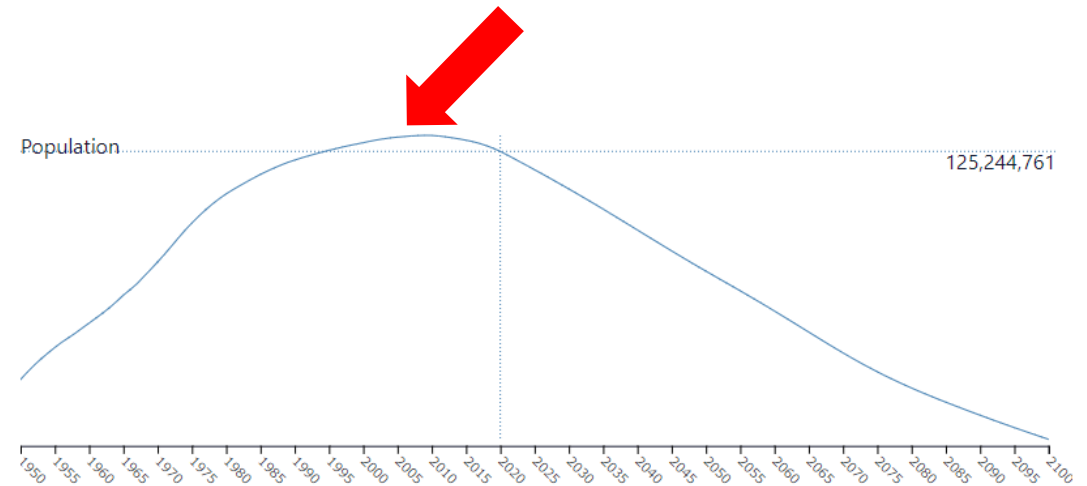
# Population of Japan

Japan ▼  
2020

Population: 125,244,760



Peaked in 2008



YEAR   2020

COUNTRY A B C D E F G H I J K L M N O P Q R S T U V W Y Z

Jamaica

Jordan

Japan

# Population of Thailand

Thailand ▼  
2020

Population: 71,475,664

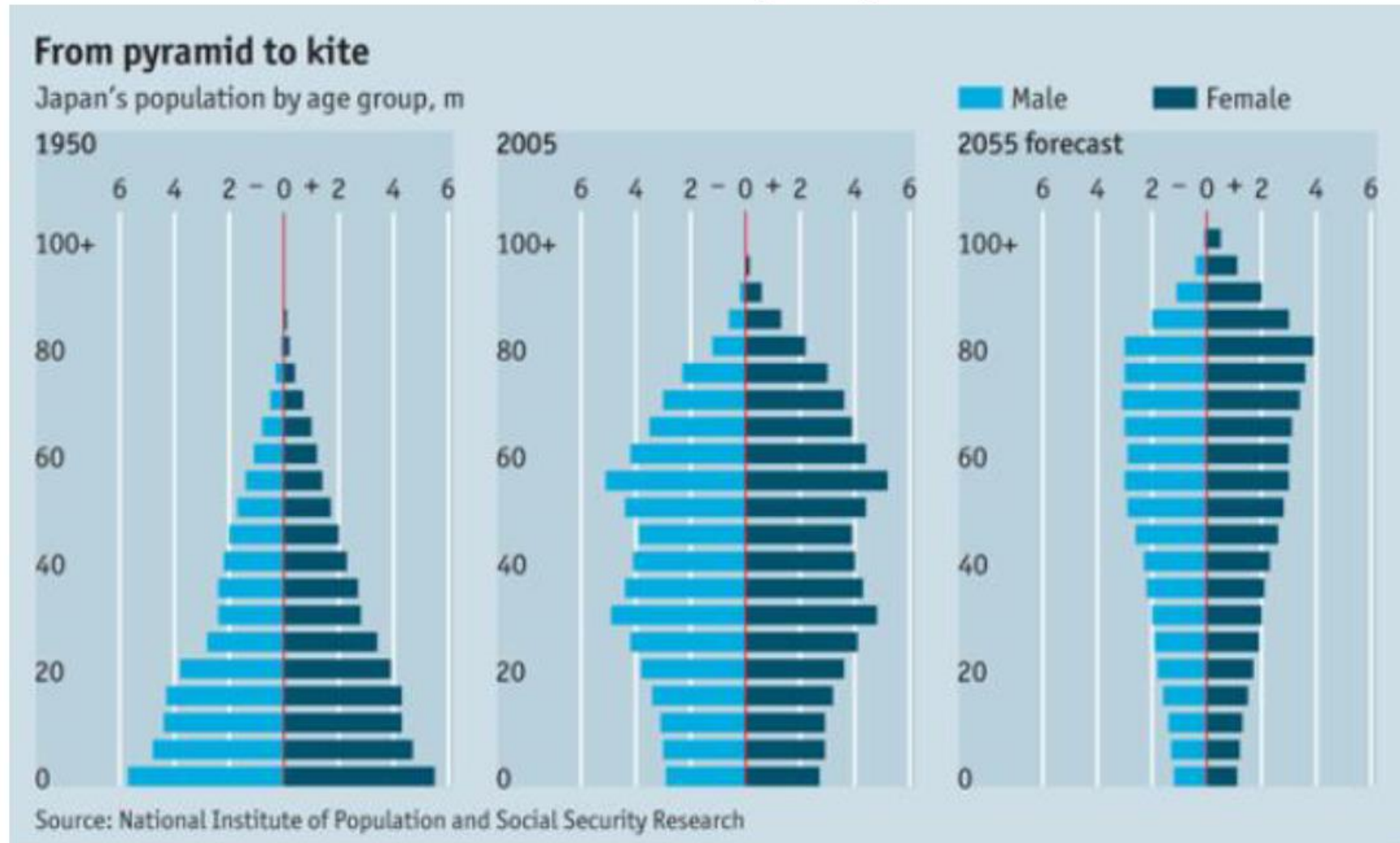


YEAR   2020

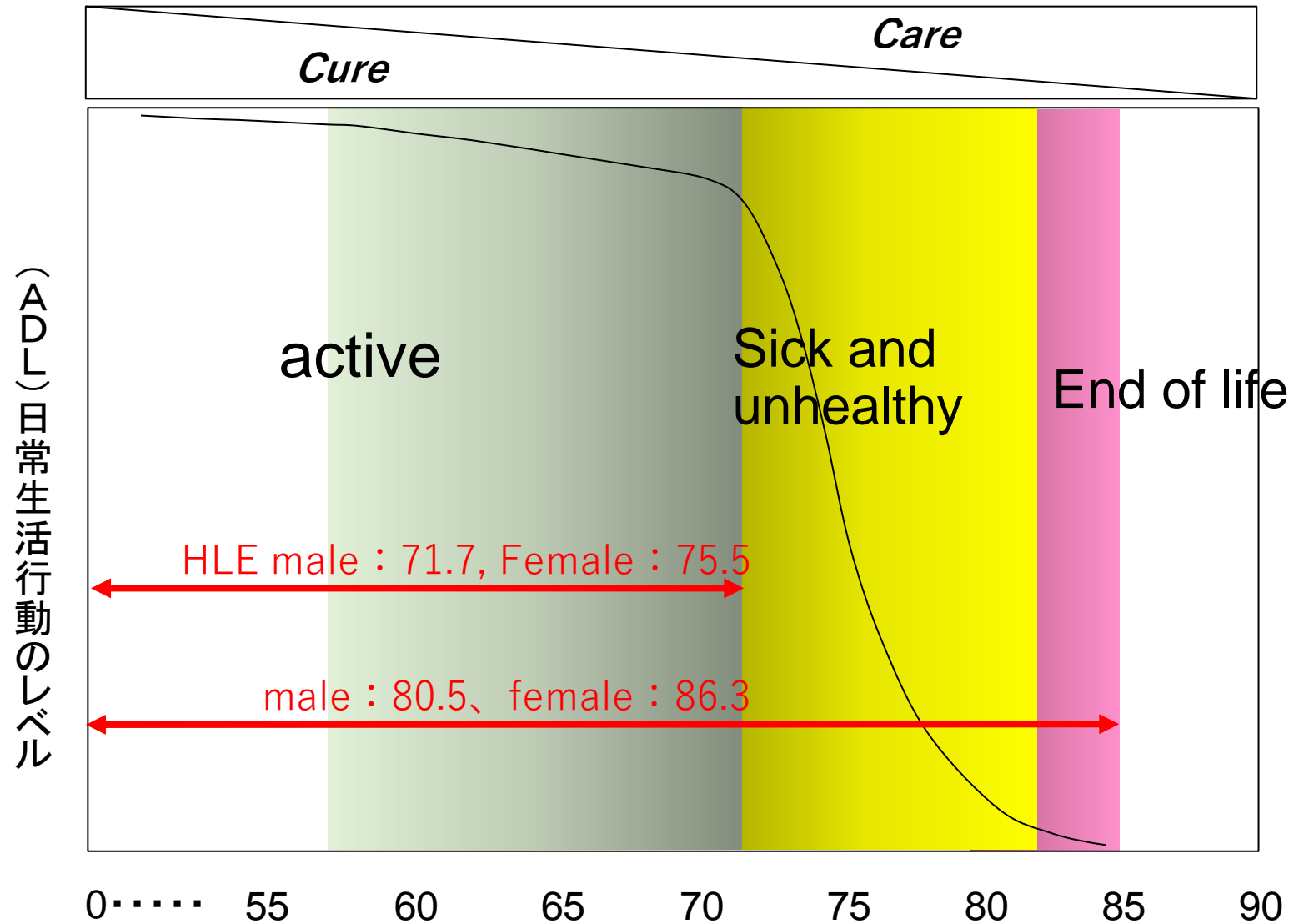
COUNTRY

- [Tajikistan](#)
- [Tonga](#)
- [TFYR Macedonia](#)
- [Trinidad and Tobago](#)
- [Thailand](#)
- [Tunisia](#)
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# Changing population structure of Japan

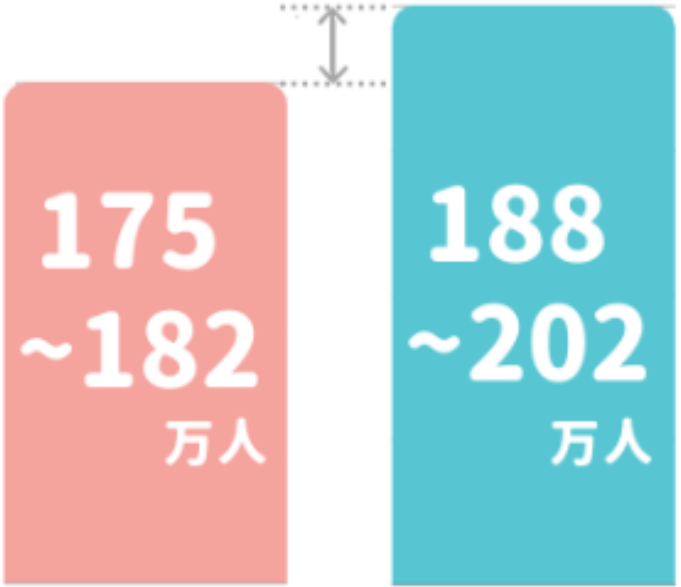


# Healthy life expectancy(HLE)



# Nurse Shortage

Ministry of Health, Labor and Welfare estimates **270,000** **nurses shortage** as of 2040 even though the number of new graduates of nursing schools keeps increasing.



#Nurses  
In Job

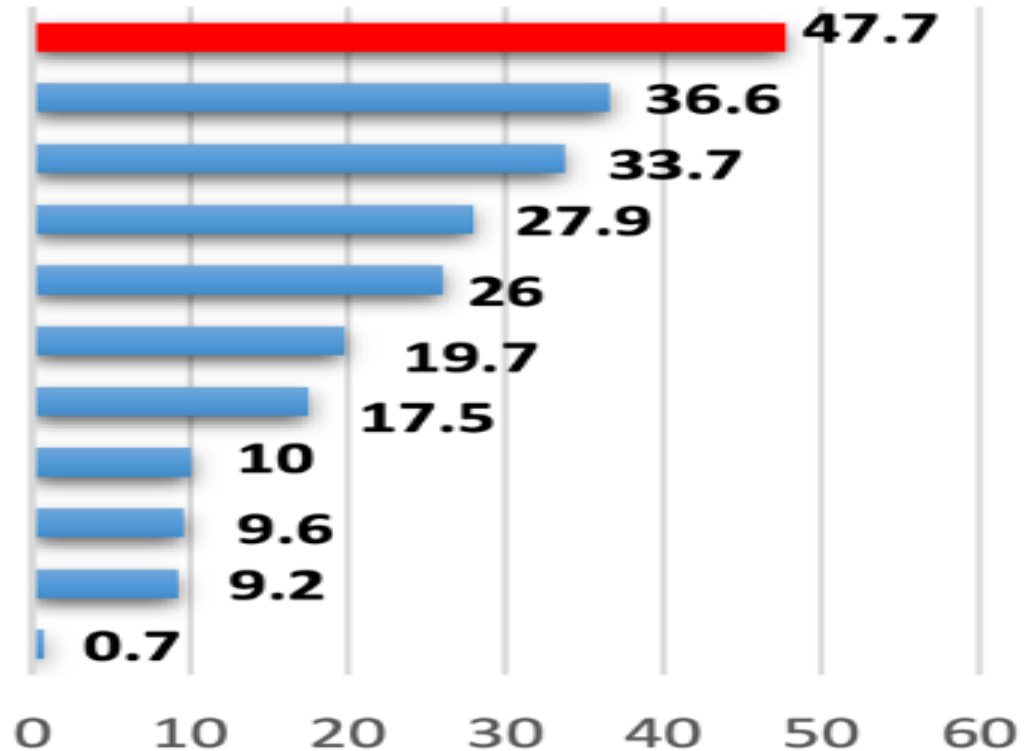
#Necessary  
Nurses  
In Job

Data: White Paper of Health, Labor and Welfare, 2019.



# Job dissatisfaction of nurses

Poor working conditions/hardship  
Low compensation  
Cannot take paid holidays  
Hard night shift  
No sense accomplishment  
Unsatisfactory human relations  
Family issues  
Cannot catch up innovation  
Do not want to get involved in medical  
accident



Data: Japan Federation of Healthcare Workers Unions 2017.

# Turnover of nurses

The turnover rates of nurses by prefecture

Tokyo (14.6%)

Kanagawa (14.6%)

Osaka Prefecture (14.3%)

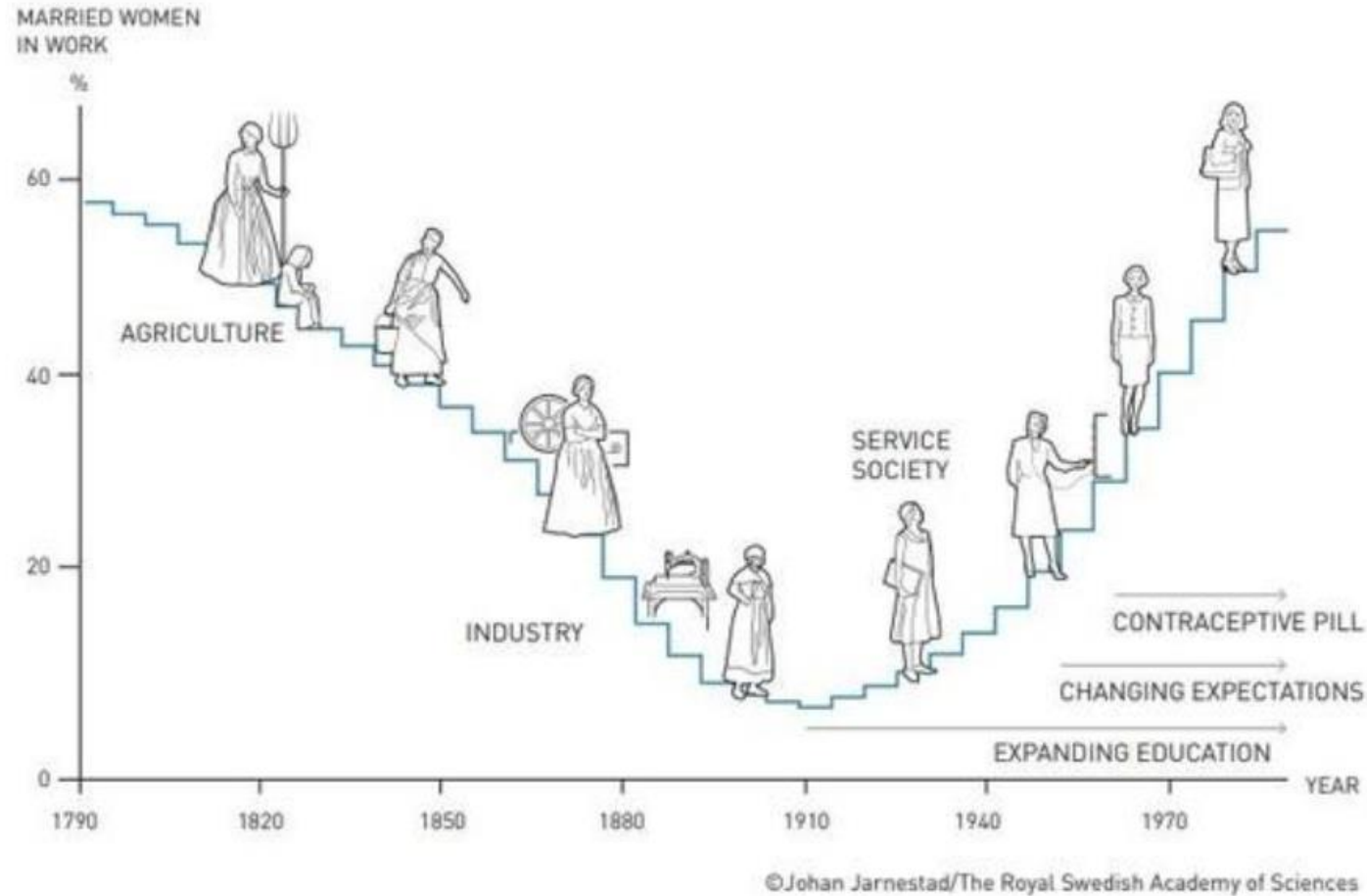
On the other hand, in Tokushima Prefecture, the turnover rate was 5.9%, and in Aomori and Yamagata Prefectures, 7.3%, indicating a nearly two-fold difference in turnover rates by prefecture.

By job type, private hospitals had the highest turnover rate (14.6%), while public hospitals had the lowest (8.0%).

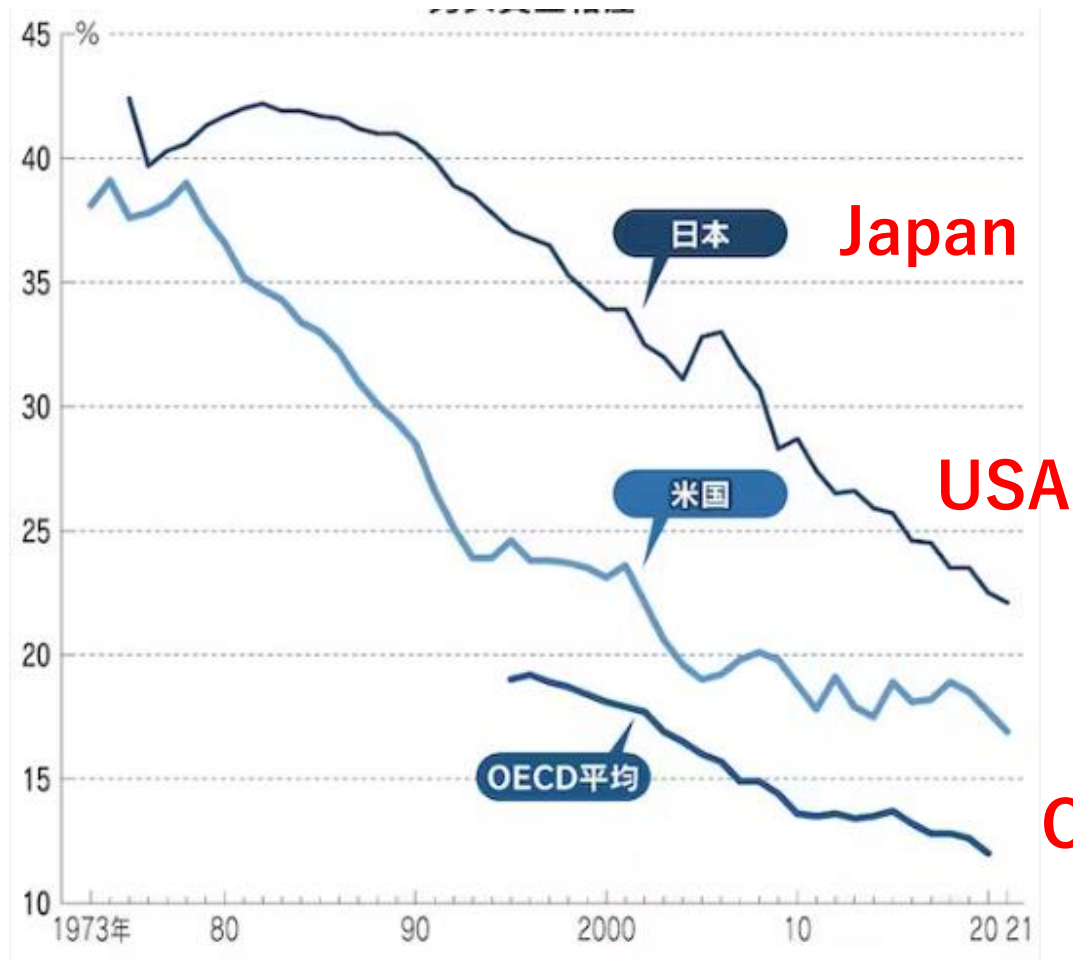
# U curve: percentage of women in work



Claudia Goldin



# Wage disparity between men and women



Japan's gender wage gap is double those of developed countries.

A Grand Gender Convergence  
(Goldin, 2014)

Data: OECD compensation census, 2022

# Occupational gender segregation

**Gender occupational segregation (GOS)** refers to the degree to which individuals engaged in specific occupations or jobs are biased toward one gender.

As women's educational attainment has risen, many women are now working in higher-paying occupations that used to be dominated by men.

Occupational segregation between men and women has narrowed, and so has the wage gap. This is **Grand Gender Convergence** (Goldin, 2014).

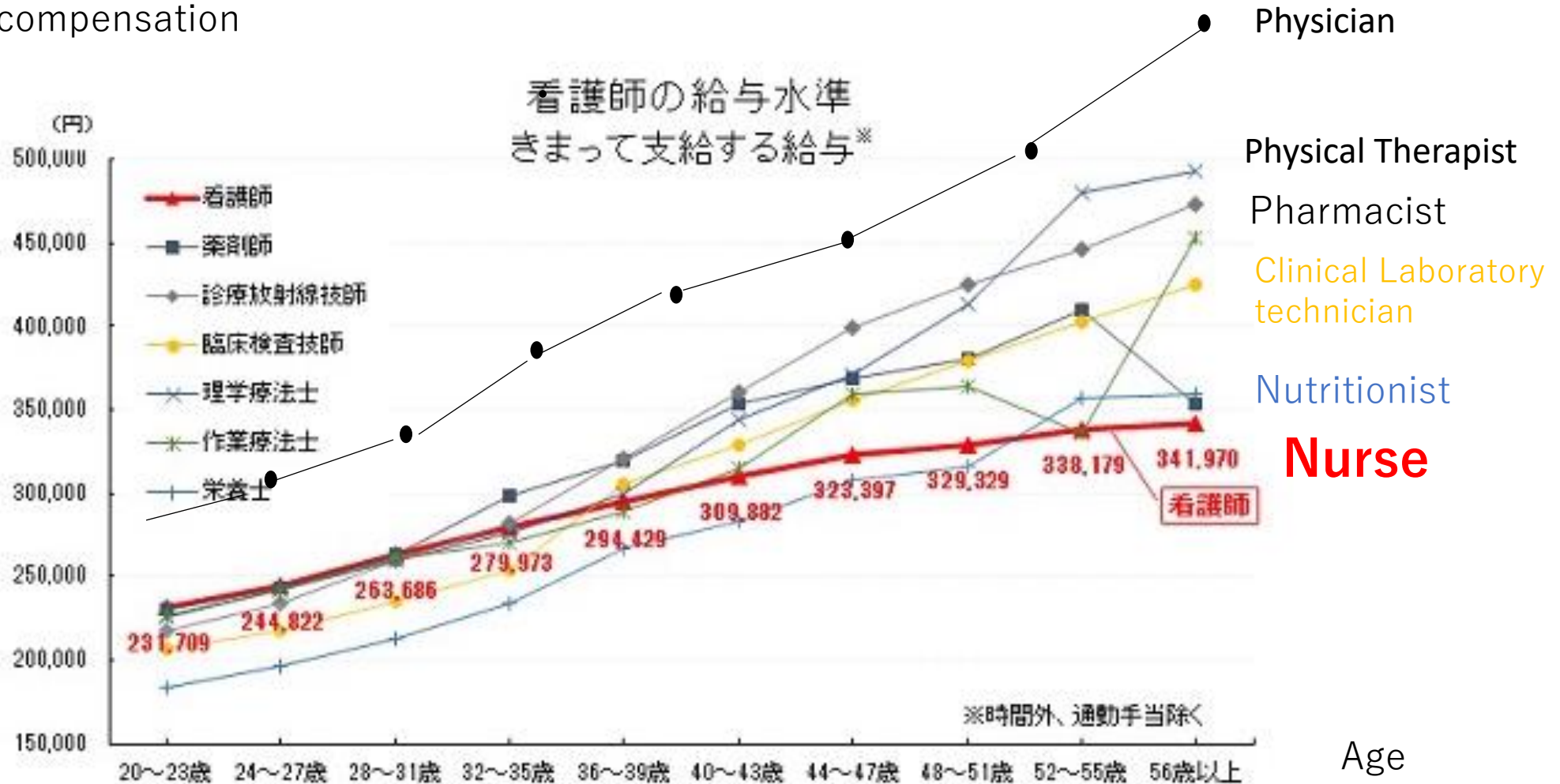
Nursing used to be a majority female occupation; the name “KANGOSHI” replaced it in 2002, but the relatively low wage levels applied to female nurse have not improved to date.

# Wage (hourly wage) as defined by labor economics

$$\text{Wages} = \frac{\text{Fixed cash salary (month)} + (\text{annual bonus}/12)}{\text{Monthly scheduled actual working hours} + \text{monthly overtime actual working hours}}$$

# Comparison of wages

Monthly compensation



Data: developed based on Japanese National Personnel Authority, 2019

# Comparison of GOS: physician vs nurse

High-paying professions, exemplified by occupations like **physicians**, were male-dominated. However, with the entry of competent female into these professions, the degree of **GOS** has decreased.

Conversely, low income occupations, such as **nursing**, were female-dominated. Yet, with the inclusion of male in these roles, the degree of **GOS** has also decreased.



# Preliminary Analysis

In the table above, calculate the extent to which being a MALE or FEMALE affects the high or low wages for all occupations.

1. Calculate the average wage for males:

1. Sum of (Male % \* Annual Pay) for all occupations

2.  $(77.2\% * 1462.6) + (38.4\% * 401.3) + (60\% * 401.3) + (38.6\% * 548.5) + (30\% * 433.6) + (10\% * 355.9) + (9.1\% * 468.2)$

3.  $\approx 1128.172 + 154.152 + 240.78 + 211.01 + 130.08 + 35.59 + 42.722$

4.  $\approx 1942.414$  (approximately)

2. Calculate the average wage for females:

1. Sum of (Female % \* Annual Pay) for all occupations

2.  $(22.8\% * 1462.6) + (61.6\% * 401.3) + (40\% * 401.3) + (61.4\% * 548.5) + (70\% * 433.6) + (90\% * 355.9) + (90.9\% * 468.2)$

3.  $\approx 334.428 + 247.148 + 160.52 + 337.49 + 303.52 + 320.31 + 425.478$

4.  $\approx 2138.416$  (approximately)

3. Find the difference between the average male wage and average female wage:

1.  $1942.414 - 2138.416 \approx -196.002$

The result is approximately -196.002, indicating that, on average, **being female is associated with lower wages across all occupations in the table**. It is implicated that there exists **gender wage gap**.

# Why Nurses' wage is low?

- A suppressed seniority wage curve is used as a means of controlling rising labor costs (Matsushita, 2020).
- The current reimbursement system for nursing care is centered on the number of nurses per patient and does not incorporate competence and skill (Matsushita, 2022).
- Nurses' wages are determined based on age and managerial position (Tsunoda, 2007)
- In the West, particularly in English speaking countries, salaries are not automatically determined by fixed factors such as age or tenure. Rather, there is a social consensus that wages should be paid for ability and performance, and determining wages based on age, gender, race, or religious beliefs and values is considered illegal (Matsushita, 2004).

# Consequences of low wage of nurses

- The fact that nurses' wages are inadequate compared to their demanding work environment has contributed to the creation of a latent nursing workforce estimated at about 700,000 (Fukui, 2021).
- Of the nursing staff who are working, 44.9% are considering leaving their current employer. Of those who are considering leaving their current employers, the most frequent response as a condition they would like to see improved in order to continue working at their current employer was “a wage commensurate with the work” (Japan Nurse Association, 2021).

# Career development system (Career Ladder)

The career ladder is a system that supports the development of nurses' abilities and performance of their duties.

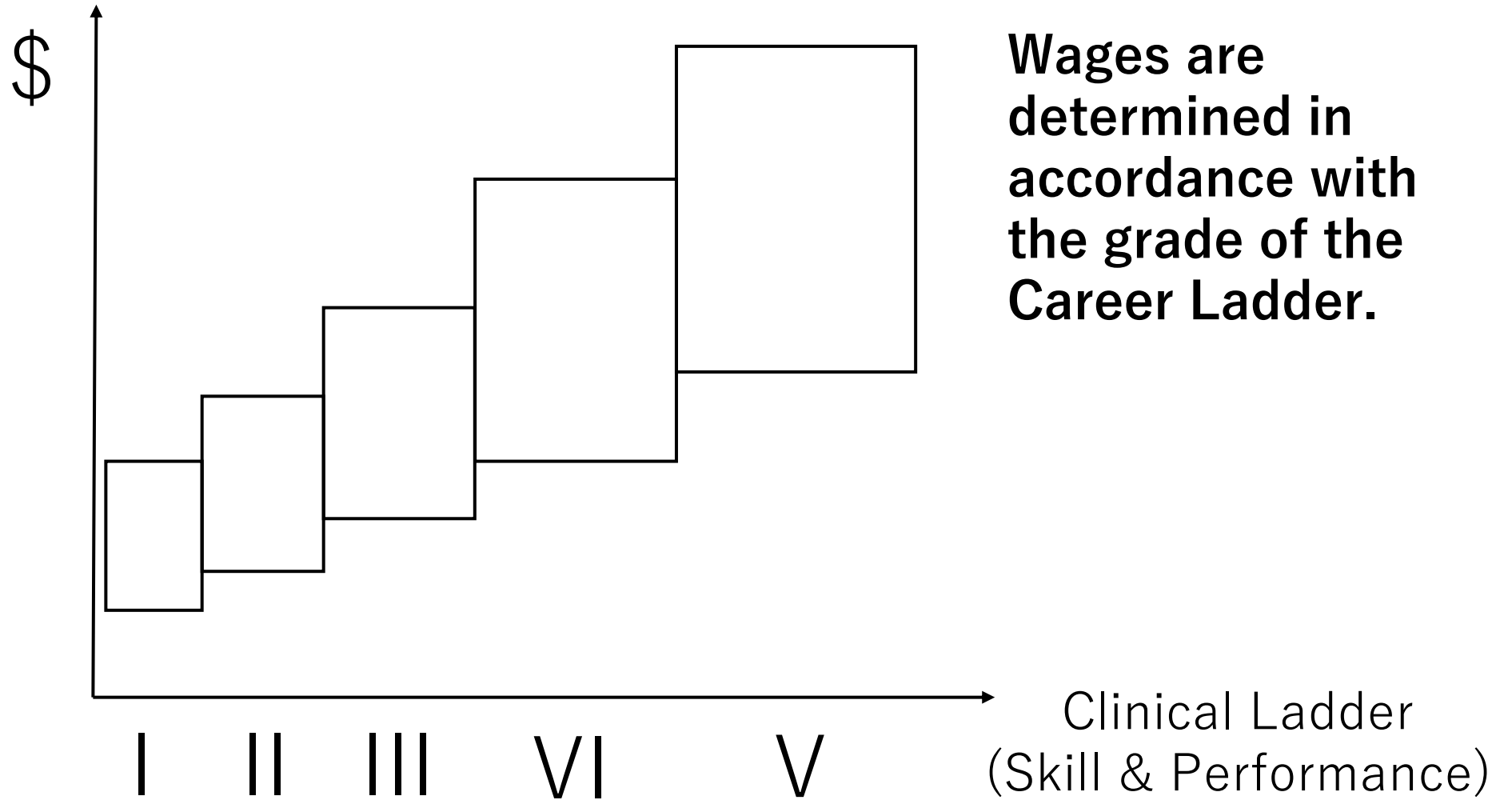
As nurses develop their abilities and become capable of performing more advanced tasks, their grade on the ladder will increase.

However, there is no or only a weak link with wages for nurses in Japan. In English-speaking countries, wages are determined in accordance with the career ladder.

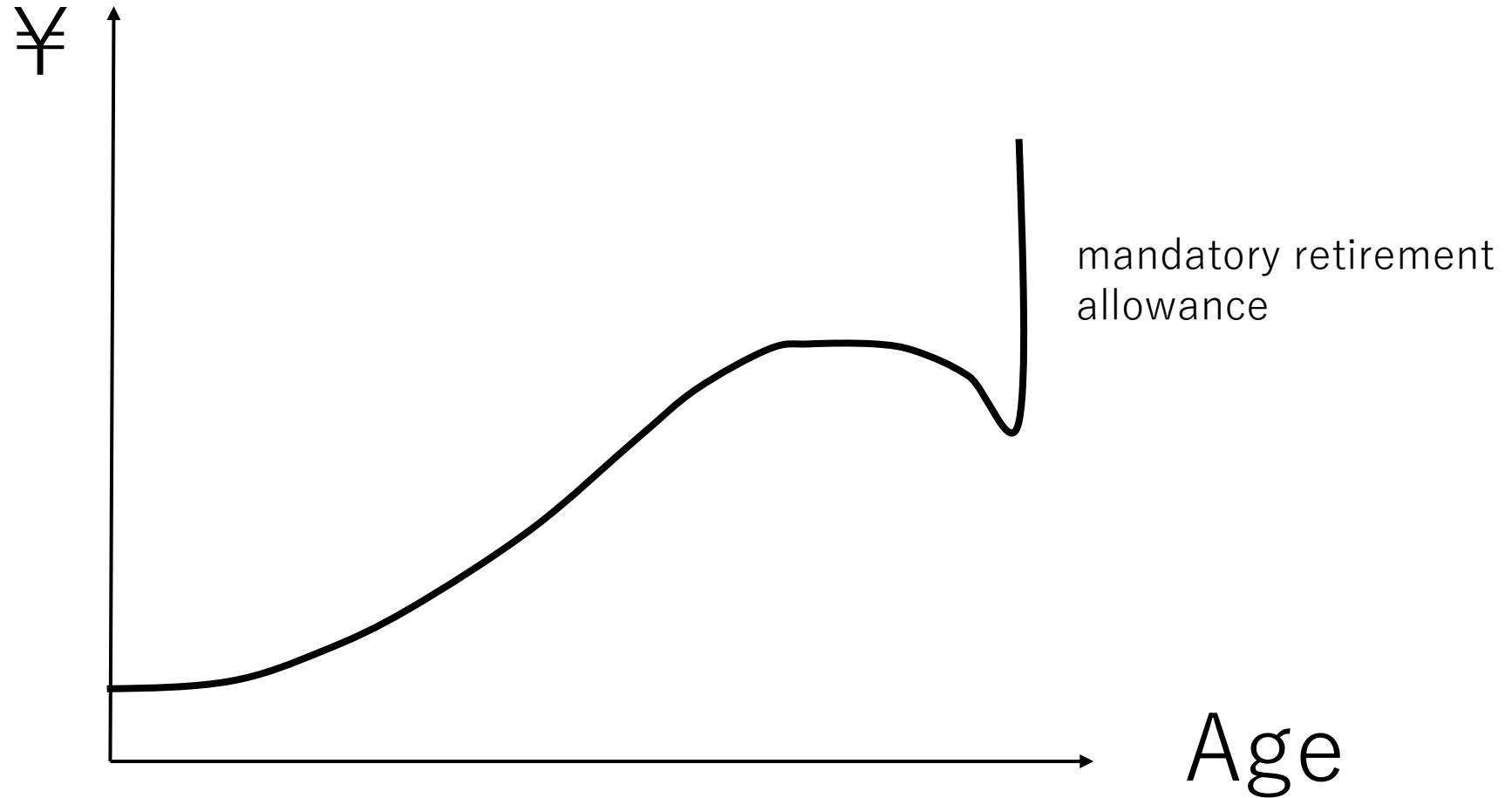
# Career development system (Career Ladder)

定義	レベル		I	II	III	IV	V
	レベル毎の定義		基本的な看護手順に従い必要に応じ助言を得て看護を実践する	標準的な看護計画に基づき自立して看護を実践する	ケアの受け手に合う個別的な看護を実践する	幅広い視野で予測的判断をもち看護を実践する	より複雑な状況において、ケアの受け手にとっての最適な手段を選択し、QOLを高めるための看護を実践する
看護の核となる実践能力	ニーズをとらえる力	【レベル毎の目標】	助言を得てケアの受け手や状況(場)のニーズをとらえる	ケアの受け手や状況(場)のニーズを自らとらえる	ケアの受け手や状況(場)の特性をふまえたニーズをとらえる	ケアの受け手や状況(場)を統合しニーズをとらえる	ケアの受け手や状況(場)の関連や意味をふまえてニーズをとらえる
		【行動目標】	<input type="checkbox"/> 助言を受けながらケアの受け手に必要な身体的、精神的、社会的、スピリチュアルな側面から必要な情報収集ができる <input type="checkbox"/> ケアの受け手の状況から緊急度をとらえることができる	<input type="checkbox"/> 自立してケアの受け手に必要な身体的、精神的、社会的、スピリチュアルな側面から必要な情報収集ができる <input type="checkbox"/> 得られた情報をもとに、ケアの受け手の全体像としての課題をとらえることができる	<input type="checkbox"/> ケアの受け手に必要な身体的、精神的、社会的、スピリチュアルな側面から個別性を踏まえ必要な情報収集ができる <input type="checkbox"/> 得られた情報から優先度の高いニーズをとらえることができる	<input type="checkbox"/> 予測的な状況判断のもと身体的、精神的、社会的、スピリチュアルな側面から必要な情報収集ができる <input type="checkbox"/> 意図的に収集した情報を統合し、ニーズをとらえることができる	<input type="checkbox"/> 複雑な状況を把握し、ケアの受け手を取り巻く多様な状況やニーズの情報収集ができる <input type="checkbox"/> ケアの受け手や周囲の人々の価値観に応じた判断ができる
	ケアする力	【レベル毎の目標】	助言を得ながら、安全な看護を実践する	ケアの受け手や状況(場)に応じた看護を実践する	ケアの受け手や状況(場)の特性をふまえた看護を実践する	様々な技術を選択・応用し看護を実践する	最新の知見を取り入れた創造的な看護を実践する
		【行動目標】	<input type="checkbox"/> 指導を受けながら看護手順に沿ったケアが実施できる <input type="checkbox"/> 指導を受けながら、ケアの受け手に基本的援助ができる <input type="checkbox"/> 看護手順やガイドラインに沿って、基本的看護技術を用いて看護援助ができる	<input type="checkbox"/> ケアの受け手の個性を考慮しつつ標準的な看護計画に基づきケアを実践できる <input type="checkbox"/> ケアの受け手に対してケアを実践する際に必要な情報を得ることができる <input type="checkbox"/> ケアの受け手の状況に応じた援助ができる	<input type="checkbox"/> ケアの受け手の個性に合わせて、適切なケアを実践できる <input type="checkbox"/> ケアの受け手の潜在的・潜在的ニーズを察知しケアの方法に工夫ができる <input type="checkbox"/> ケアの受け手の個性をとらえ、看護実践に反映ができる	<input type="checkbox"/> ケアの受け手の顕在的・潜在的なニーズに応えるため、幅広い選択肢の中から適切なケアを実践できる <input type="checkbox"/> 幅広い視野でケアの受け手をとらえ、起こりうる課題や問題に対して予測的および予防的に看護実践ができる	<input type="checkbox"/> ケアの受け手の複雑なニーズに対応するためあらゆる知見(看護および看護以外の分野)を動員し、ケアを実践・評価・追求できる <input type="checkbox"/> 複雑な問題をアセスメントし、最適な看護を選択できる
	協働する力	【レベル毎の目標】	関係者と情報共有ができる	看護の展開に必要な関係者を特定し、情報交換ができる	ケアの受け手やその関係者、多職種と連携ができる	ケアの受け手を取り巻く多職種の力を調整し連携できる	ケアの受け手の複雑なニーズに対応できるように、多職種の力を引き出し連携に活かす
		【行動目標】	<input type="checkbox"/> 助言を受けながらケアの受け手を看護していくために必要な情報が何かを考え、その情報を関係者と共有することができる <input type="checkbox"/> 助言を受けながらチームの一員としての役割を理解できる <input type="checkbox"/> 助言を受けながらケアに必要と判断した情報を関係者から収集することができる <input type="checkbox"/> ケアの受け手を取り巻く関係者の多様な価値観を理解できる <input type="checkbox"/> 連絡・報告・相談ができる	<input type="checkbox"/> ケアの受け手を取り巻く関係者の立場や役割の違いを理解したうえで、それぞれ積極的に情報交換ができる <input type="checkbox"/> 関係者と密にコミュニケーションを取ることができる <input type="checkbox"/> 看護の展開に必要な関係者を特定できる <input type="checkbox"/> 看護の方向性や関係者の状況を把握し、情報交換できる	<input type="checkbox"/> ケアの受け手の個別的なニーズに対応するために、その関係者と協力し合いながら多職種連携を進めていくことができる <input type="checkbox"/> ケアの受け手とケアについて意見交換できる <input type="checkbox"/> 積極的に多職種に働きかけ、協力を求めることができる	<input type="checkbox"/> ケアの受け手がおかれている状況(場)を広くとらえ、結果を予測しながら多職種連携の必要性を見極め、主体的に多職種と協力し合うことができる <input type="checkbox"/> 多職種間の連携が機能するように調整できる <input type="checkbox"/> 多職種の活力を維持・向上させる関わりができる	<input type="checkbox"/> 複雑な状況(場)の中で見えにくくなっているケアの受け手のニーズに適切に対応するために、自律的な判断のもと関係者に積極的に働きかけることができる <input type="checkbox"/> 多職種連携が十分に機能するよう、その調整的役割を担うことができる <input type="checkbox"/> 関係者、多職種間の中心的役割を担うことができる <input type="checkbox"/> 目標に向かって多職種の活力を引き出すことができる
	意思決定を支える力	【レベル毎の目標】	ケアの受け手や周囲の人々の意向を知る	ケアの受け手や周囲の人々の意向を看護に活かすことができる	ケアの受け手や周囲の人々に意思決定に必要な情報提供や場の設定ができる	ケアの受け手や周囲の人々の意思決定に伴うゆらぎを共有でき、選択を尊重できる	複雑な意思決定プロセスにおいて、多職種も含めた調整的役割を担うことができる
		【行動目標】	<input type="checkbox"/> 助言を受けながらケアの受け手や周囲の人々の思いや考え、希望を知ることができる	<input type="checkbox"/> ケアの受け手や周囲の人々の思いや考え、希望を意図的に確認することができる <input type="checkbox"/> 確認した思いや考え、希望をケアに関連づけることができる	<input type="checkbox"/> ケアの受け手や周囲の人々の意思決定に必要な情報を提供できる <input type="checkbox"/> ケアの受け手や周囲の人々の意向の違いを理解できる <input type="checkbox"/> ケアの受け手や周囲の人々の意向の違いを多職種に代弁できる	<input type="checkbox"/> ケアの受け手や周囲の人々の意思決定プロセスに看護職の立場で参加し、適切な看護ケアを実践できる	<input type="checkbox"/> 適切な資源を積極的に活用し、ケアの受け手や周囲の人々の意思決定プロセスを支援できる <input type="checkbox"/> 法的および文化的配慮など多方面からケアの受け手や周囲の人々を擁護した意思決定プロセスを支援できる

# The wage model for nurses is job-based (English speaking countries)



# Age-based wage (Japan)



# Conclusions

- 1. There exists gender wage gap in healthcare occupations.**
- 2. Wages for nurses in Japan are comparatively low, and the main factor that determines wages is age.**
- 3. This trend differs significantly from the global standard.**
- 4. Even though the number of nursing schools and those of new nursing graduates increase, the failure to implement effective human resource management will result in inadequate workplace retention. Consequently, the issue of nursing shortages will remain unresolved.**
- 5. Globalism, Japanese traditionalism, and Japanese nurses' labor practices will interact to change the wage structure of Japanese nurses in the future.**
- 6. There is significant room to move away from the old age-based wage system and shift to a job-based wage system (performance-based pay).**



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# Hiro Matsushita, Ph.D.

- M.Sc. in Health Administration, Cornell University Graduate School
- Ph.D. in Health System Science, Tokyo Institute of Technology
- 2008 - 2009 Member of Social Innovation Research Working Group, Cabinet Office, Government of Japan
- 2012 - 2013. Member of the Expert Panel for the Ministry of Economy, Trade and Industry and the Japan Nursing Association's Research Project for the Creation of the Healthcare Industry
- 2020 - Executive Board Member, Japan Society of Nursing Economics and Policies
- 2021 - International Committee, Canadian Interprofessional Health Collaborative National Competency Framework Focus Group