

**KAMT POLICY**

# Survey on Medical Technologist Desired Wage in Primary and Secondary Medical Institutions Nationwide in the Republic of Korea

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## 한국의 1차·2차 의료기관 임상병리사의 희망임금 실태조사

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This study assessed the desired wage guidelines for medical technologists (MTs), mainly primary care providers and those in secondary medical institutions, in 16 cities and provinces in Korea. A survey of 1,327 MTs was conducted using a structured Google questionnaire from August 1, 2022, to September 30, 2022. The wage levels differed according to gender, age, education, career, region, and employment status. There were differences in wage levels according to gender and region with less than one year of career, and the wage gap was relatively larger for woman than man. An awareness of wage compensation appropriate for work performance, and technology value compensation were low at 2.01, 2.23, and 2.30, respectively. This study suggests that primary and secondary medical institutions should provide reasonable wages compensation for MTs' work in order to create an environment where MTs can receive stable jobs and work. Moreover, the Korean Association of Medical Technologists should establish a cooperative system so that the starting wage of MTs in primary and secondary medical institutions can receive the desired wage of 34 million won.

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**INTRODUCTION**

Recently, the rapid aging of the population and increasing interest in quality of life have increased the demand for high-quality medical services in terms of healthcare, and the organization of health care has changed to a more diverse structure [1, 2]. Since wages

have a two-sided nature of cost and income, it is vital to find an appropriate level [3].

Medical institutions that supply medical services in the medical market earn exclusive profits based on their monopoly on supplying medical services, and pay workers less than the market value of their products [4, 5]. Therefore, in the medical market, there are generally no appropriate compensation for workers' labor based on market value and production contribution, and there are two types of unfair compensation due to a monopoly on the supply of medical services and a mono-

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poly on demand for manpower.

Medical technologists (MTs) at primary and secondary medical institutions have frequent turnover due to employment instability, poor working condition, and low wage, and employment instability leads to a decline in the quality of tests, which worsens management. The smaller the size of small and medium-sized hospitals, the less they are located in non-metropolitan areas, the less they are undergoing structural and social treatment and stress of job stress such as lack of manpower, overtime, and low wage employment.

Due to the characteristics of the governance structure and decision-making structure, primary and secondary medical institutions are often disorganized in their organizational structure and division of works, and are often determined independently by one manager. Due to the lack of a strategic personnel management system such as manpower recruitment, career management, and motivation, it is difficult for MTs in primary and secondary medical institutions to have an opportunity to improve their capabilities. In addition, there is few opportunity to strengthen expertise due to the heavy burden of MTs work, such as many single-person multi-task in the field of inspection and administrative work in addition to MTs work. Compared to higher hospitals, the calculation of overtime hours such as shifts and on-call work systems or long hours of work are not well reflected in legal working hours regulations and overtime allowances. Accordingly, in order to restore the job satisfaction and mission of MTs in primary and secondary medical institutions, which play a pivotal role in the medical community, it is urgent to prepare standardized wage guidelines based on the government and association level for working conditions and wage system.

Until now, most of the previous studies have been centered on nurses, nursing assistants, radiology technicians, and opticians in the health care profession, and there have been no studies on MTs nationwide, and the exact status of MTs wage has not yet been investigated [6-9].

This study was carried out to assess the working conditions and wage levels of MTs and to determine MTs' desired wage guideline for 16 cities and provinces in primary care provider and secondary medical institutions nationwide in Korea. Through this study, we would like to provide basic data to improve the rights and interests of MTs by analyzing problems such as the status of the wage system and job conditions of MTs and establishing guidelines and improving measures for reasonable wage levels.

## MATERIALS AND METHODS

### 1. Study Participants

In order to find out the working environment and wage status of MTs working in 16 cities and provinces nationwide, this study selected 1,500 MTs from 16 cities and provinces nationwide. The distribution of target institutions was set at the rate of 70% of primary medical institutions and 30% of secondary medical institutions, and the first was selected for members who sent participation texts and responses to each city and provincial meeting. A survey of 1,500 from 16 cities and provinces across the country was conducted using a structured Google questionnaire from August 1, 2022 to September 30, 2022, and 1,327 peoples, excluding 143 non-answer questions, were finally analyzed. The Cronbach's alpha coefficient for verifying the reliability of the questionnaire was 0.801, and the internal consistency of each measurement item was judged to be sufficient.

### 2. Questionnaires

The questionnaire consisted of a total of 30 questions, and the working conditions including general characteristics 5 questions, work scope and quality management consisted of a total of 12 questions, 5 questions for wages, 2 questions for turnover, and 6 questions for work satisfaction. Satisfaction questions were measured in the form of a Likert-scale ranging from 1 to 5, strongly disagree (1), somewhat disagree (2), neither

disagree (3), somewhat agree (4), strongly agree (5).

### 3. Statistical Analysis

The Stata 12.0 program (StataCorp LLC.) survey procedure was used for statistical analysis. The Chi-square test or one-way analysis of variance (ANOVA) was used for comparison of the relationship between wage and determinant factors. A two-sided *P*-values lower than 0.05 was regarded to be statistically significant.

## RESULTS

### 1. General Characteristics

Table 1 shows the general characteristics of participants. The gender was 11.5% for men and 88.5% for women. The age group was 60.1% in their 20s, 31.2% in their 30s, 6.9% in their 40s, and 1.8% in their 50s and older, showing a high proportion of people in their 20s and 30s. There were more singled people with 67.0% and 33.0% married. In academic background, 60.6% of associate's degree, 38.6% of bachelor's degree, 0.7% of master's degrees, and 0.1% of doctoral degree were found to be below bachelor's degrees. MTs positions in

working institutions were the most common with 77.4% of employees, followed by 13.6% of the chief salary and 9.0% of the department head positions, which are mostly employees, the report showed (Table 1).

### 2. Working Conditions and Wage

Table 2 indicates the working conditions and wage level of MTs. The Region was 40.9% in the metropolitan area classified as Seoul, Gyeonggi, and Incheon, and 59.1% in the non-metropolitan area classified as the remaining 13 cities and provinces. The types of medical institutions were 73.8% of primary medical institutions and 26.2% of secondary medical institutions. Total number of MTs were 1~2 peoples (35.0%), 3~4 peoples (19.1%), 5~9 peoples (19.6%), and 10 or more peoples (26.3%). In career, 33.1% of participants was less than 1 year, less than 1~4 years (26.4%), less than 4~6 years (22.1%), less than 6~8 years (11.0%), and more than 8 years (7.5%) respectively. The employment status was 90.4% for regular workers and 9.6% for non-regular workers, and the employment type of MTs was found to be centered on regular workers. Total weekly working hours were 17.6% for less than 40 hours a week, 51.2% for less than 40~44 hours a week, 17.3% for less than 44~48 hours a week, 7.1% for less than 48~52 hours a week, and 6.9% for more than 52 hours a week.

Allowance for working on holidays (including Saturdays and alternative holidays) was no (32.0%) and yes (68.0%). The scope of work for one MT was found to be performing multiple tests, focusing on blood collection (14.4%), hematology (12.0%), urinalysis (11.9%), chemistry (11.2%), physiological function (11.2%), immunology and serology (9.4%), COVID-19 sample collection and test (8.2%), consignment work (6.7%). Internal quality control (QC) took 83.3%, and internal QC time took 28.6% for less than 30 minutes, 47.8% for less than 30~60 minutes, 16.9% for less than 1 hour~1 hour 30 minutes, 3.9% for less than 1 hour~2 hours, and 2.8% for more than 120 minutes. 62.3% of the external QC was carried out and 37.7% was not carried out. The average monthly wage before tax of the current work-

**Table 1.** General characteristics

Characteristics	N (%)
Gender	
Man	153 (11.5)
Woman	1,174 (88.5)
Age (yr)	
20s	798 (60.1)
30s	414 (31.2)
40s	91 (6.9)
50s and over	24 (1.8)
Marital status	
Single	889 (67.0)
Married	438 (33.0)
Education	
Associate	804 (60.6)
Bachelor	512 (38.6)
Master	10 (0.7)
Doctoral	1 (0.1)
Position	
Employees	1,026 (77.4)
Chief salary	181 (13.6)
Department head	120 (9.0)
Total	1,327 (100.0)

**Table 2.** Working conditions and wage (N=1,327)

Characteristics	N (%)
Region	
Metropolitan	543 (40.9)
Non-metropolitan	784 (59.1)
Types of medical institutions	
1st: self-testing (including outsourcing)	624 (47.0)
1st: self-test not conducted (full consignment)	355 (26.8)
2nd	348 (26.2)
Total number of medical laboratory technologists	
1~2	464 (35.0)
3~4	254 (19.1)
5~9	260 (19.6)
≥10	349 (26.3)
Career (yr)	
<1	439 (33.1)
1~3.9	350 (26.4)
4~5.9	293 (22.1)
6~7.9	146 (11.0)
≥8	99 (7.5)
Employment status	
Regular	1,199 (90.4)
Non-regular	128 (9.6)
On-duty hours per weeks	
<40	234 (17.6)
40~43.9	679 (51.2)
44~47.9	229 (17.3)
48~51.9	94 (7.1)
≥52	91 (6.9)
Allowance for working on holidays	
No	425 (32.0)
Yes	902 (68.0)
Duties of one MT (multiple responses)	
Blood collection	981 (14.4)
Chemistry	760 (11.2)
Hematology	815 (12.0)
Immunology and serology	638 (9.4)
Urinalysis	810 (11.9)
Fecal occult blood	335 (4.9)
COVID-19 sample collection and test	554 (8.2)
Physiological function	762 (11.2)
Requesting a public corporation	147 (2.2)
Physical measurement, vision and hearing measurement	212 (3.1)
Consignment work	452 (6.7)
Others	325 (4.8)
Internal quality control	
Yes	1,106 (83.3)
No	221 (16.7)
Time required for internal quality control (min)	
<30	316 (28.6)
30~59	529 (47.8)
60~89	187 (16.9)
90~119	43 (3.9)
≥120	31 (2.8)
External quality control	
Yes	827 (62.3)
No	500 (37.7)

**Table 2.** Continued

Characteristics	N (%)
Average monthly wage (ten thousand won)	
<200	195 (14.7)
200~229	439 (33.1)
230~249	299 (22.5)
250~299	293 (22.1)
≥300	101 (7.6)
Desired monthly wages (ten thousand won)	
<200	15 (1.1)
200~229	75 (5.7)
230~249	154 (11.6)
250~279	397 (29.9)
280~299	194 (14.6)
300~349	339 (25.6)
≥350	153 (11.5)
Written in the form of a standard labor contract	
Yes	997 (75.1)
No	330 (24.9)
Issued in the form of a standard labor contract	
Yes	921 (69.4)
No	406 (30.6)
Turnover experience	
No	260 (19.5)
Yes (once)	338 (25.5)
Yes (twice)	305 (23.0)
Yes (more than three times)	424 (32.0)
Reasons for turnover	
Wage	393 (36.8)
Working environment & benefits	329 (30.8)
Work loading	136 (12.7)
Expiration of the contract period	131 (12.3)
Interpersonal relationship	35 (3.3)
Commuting time	23 (2.2)
Not fit for own's aptitude	9 (0.8)
Clinical pathology laboratory closure	9 (0.8)
Others	2 (0.2)

Abbreviation: MT, medical technologist.

place was less than 200 (14.7%), less than 200~230 (33.1%), less than 230~250 (22.5%), less than 250~300 (22.1%), and above 300 (7.6%) ten thousand won. The current workplace wage analysis showed that 47.8% receive wages of less than 230 ten thousand won. Currently, the average monthly pre-tax wage of the workplace was less than 200 (1.1%), less than 200~230 (5.7%), less than 230~250 (11.6%), less than 250~280 (29.9%), less than 280~350 (14.6%), less than 300~350 (25.6%), and above 350 (11.5%) ten thousand won. Currently, 48.3% of the MTs' desired wage are less than 280 ten thousand won. The difference between the

wage at work and the desired wage was 50 ten thousand won per month, showing a difference of 600 ten thousand won per year. Based on these results, the desired annual wage of MTs, a primary medical institution in 16 cities and provinces nationwide, can be estimated to be around 34 million won. Every year, 75.1% were written in the form of a standard labor contract related to wage and 24.9% were not written, and 69.4% were issued in the form of a standard labor contract related to wage, and 30.6% were not issued. In turnover experience, 80.5% answered that they had turnover experience. The turnover experience was 25.5% once, 23.0% twice, and 32.0% more than three times. The reasons for turnover were 36.8% for wage, 30.8% for working environment and benefits, 12.7% for work loading, and 12.3% for the expiration of the contract period (Table 2).

### 3. Satisfaction for Wage and Job

Table 3 demonstrates satisfaction for the current wage and job. Wage satisfaction and awareness of wage and compensation suitable for work performance were low at 2.01 and 2.23 respectively. It can be thought that the stability of maintaining the workplace is secured, but wages is perceived negatively. The perception of compensation compared to the value of one's technology was also low at 2.30. As the need for expertise as

a MT is highly recognized, it can be thought that the dissatisfaction factor with the current wage played a greater role.

As for the perception of wage compared to other hospitals, the degree to which MTs perceive that MTs' wage is less than that of other hospitals was low at 2.38. This can be thought of as reflecting the fact that many of the respondents work in private hospitals. Job satisfaction was found to be low at 2.87, and the reasons for job dissatisfaction were in the order of benefits, non-guaranteed breaks, salaries, and work overload (Table 3).

### 4. Relationship between Wage and Determinant Factors

Table 4 depicts the relationship between wage and determinant factors. The wage levels according to types of medical institutions were found to increase slightly as the size of the hospital increased, and it was not statistically significant. Even in primary medical institutions, there were many income earners of more than 300 ten thousand won (13.6%). It can be thought that MTs wage is determined by the hospital remuneration system. There was statistically significant difference in the relationship between wage levels and gender ( $P < 0.008$ ). For woman, the proportion of woman was mainly less than 250, and the proportion of man

**Table 3.** Satisfaction for wage and job (N=1,327)

Characteristics	N (%)	Mean±SD
<b>Wage</b>		
I'm satisfied with my present wage		2.01±0.89
I'm getting paid and compensated for my job performance		2.23±0.93
I'm receiving compensation that is appropriate to my technological value in the current medical institutions		2.30±0.89
Compared to other medical institutions, my current wage is reasonable		2.38±0.95
<b>Job</b>		
I'm satisfied with my current clinical pathologist work		2.87±0.85
<b>Reasons for dissatisfaction (multiple responses)</b>		
Wage	337 (25.8)	
Working environment & benefits	141 (10.8)	
Work loading	336 (25.7)	
Expiration of the contract period	353 (27.0)	
Interpersonal relationship	61 (4.7)	
Commuting time	50 (3.8)	
Not fit for own's aptitude	29 (2.2)	

was higher for wage of less than 250 and more than 300 ten thousand won. There was statistically significant difference in the association between wage levels and age ( $P<0.024$ ). Overall, the wage levels tended to rise as the age increased, and 5.4% of respondents received more than 300 ten thousand won despite being in their 20s. The wage levels in marital status were found to be higher in married people than in unmarried people, but

it was not statistically significant. This was a result similar to the relationship between age and wage in the previous analysis, and it can be thought that age and marriage are considered in the process of calculating MTs wage. In particular, at an average monthly wage of less than 250 ten thousand won, 70.7% of unmarried workers are believed to be affecting MTs due to the recent social problem of low-wage workers.

**Table 4.** Relationship between wage and determinant factors (N=1,327)

Characteristics	Wage, N (%)				<i>P</i> *
	150~200	200~250	250~300	300 over	
Gender					0.008
Man	18 (11.8)	75 (49.0)	39 (25.5)	21 (13.7)	
Woman	177 (15.1)	663 (56.5)	254 (21.6)	80 (6.8)	
Age (yr)					0.024
20s	121 (15.2)	467 (58.5)	167 (20.9)	43 (5.4)	
30s	60 (14.5)	209 (50.5)	100 (24.2)	45 (10.9)	
40s	10 (11.0)	50 (54.9)	20 (22.0)	11 (12.1)	
50s and over	4 (16.7)	12 (50.0)	6 (25.0)	2 (8.3)	
Marital status					0.086
Single	117 (13.2)	511 (57.5)	197 (22.2)	64 (7.2)	
Married	78 (17.8)	227 (51.8)	96 (21.9)	37 (8.5)	
Education					0.004
Associate	120 (14.9)	463 (57.6)	165 (20.5)	56 (7.0)	
Bachelor	73 (14.3)	272 (53.1)	126 (24.6)	41 (8.0)	
Master	2 (20.0)	3 (30.0)	2 (20.0)	3 (30.0)	
Doctoral	0 (0.0)	0 (0.0)	0 (0.0)	1 (100)	
Position					<0.001
Employees	174 (17.0)	598 (58.3)	196 (19.0)	58 (5.7)	
Chief salary	15 (8.3)	88 (48.6)	55 (30.4)	23 (12.7)	
Department head	6 (5.0)	52 (43.3)	42 (35.0)	20 (16.7)	
Region					<0.001
Metropolitan	39 (7.2)	277 (51.0)	169 (31.1)	58 (10.7)	
Non-metropolitan	156 (19.9)	461 (58.8)	124 (15.8)	43 (5.5)	
Types of medical institutions					0.060
1st: self-testing (including outsourcing)	97 (15.5)	351 (56.3)	130 (20.8)	46 (7.4)	
1st: self-test not conducted (full consignment)	60 (16.9)	202 (56.9)	71 (20.0)	22 (6.2)	
2nd	38 (10.9)	185 (53.2)	92 (26.4)	33 (9.5)	
Career (yr)					<0.001
<1	76 (17.3)	256 (58.3)	80 (18.2)	27 (6.2)	
1~3.9	54 (15.4)	194 (55.4)	84 (24.2)	18 (5.0)	
4~5.9	46 (15.7)	162 (55.3)	63 (21.5)	22 (7.5)	
6~7.9	7 (4.8)	86 (58.9)	32 (21.9)	21 (14.4)	
>8	12 (12.1)	40 (40.5)	34 (34.3)	13 (13.1)	
Employment status					<0.001
Regular	158 (13.2)	685 (57.1)	263 (21.9)	93 (7.8)	
Non-regular	37 (28.9)	53 (41.4)	30 (23.4)	8 (6.3)	
Turnover experience					0.819
No	37 (14.2)	138 (53.1)	64 (24.6)	21 (8.1)	
Yes (once)	50 (14.8)	190 (56.2)	78 (23.1)	20 (5.9)	
Yes (twice)	44 (14.4)	175 (57.4)	65 (21.3)	21 (6.9)	
Yes (more than three times)	64 (15.1)	235 (55.4)	86 (20.3)	39 (9.2)	

\*Calculated by Chi-square or ANOVA test.

There was statistically significant difference in the linkage between wage level and educational level ( $P < 0.004$ ). Among associate's degrees, 57.6% were less than 200~250, 20.5% were less than 250~300, 14.9% were less than 150~200. Among bachelor's degrees, 53.1% were less than 200~250, 24.6% were less than 250~300, and 14.3% were less than 150~200 ten thousand won. The proportion of professional bachelor's degrees was relatively high for less than 250, and the proportion of bachelor's degrees for more than 250 ten thousand won. For master's degrees, less than 250 were found to be 50%, indicating that these efforts did not affect the increase in wages despite efforts to improve academic background after employment. There was statistically significant difference in the relationship between wage levels and job position ( $P < 0.001$ ). Employees were 58.3% less than 200~250, 19.0% less than 250~300, 17.0% less than 150~200, 48.6% less than 200~250, 30.4% less than 250~300, and 12.7% more than 300 ten thousand won. The department head was statistically significant in the order of 43.3% for less than 200~250, 35.0% for less than 250~300, and 16.7% for more than 300 ten thousand won. There was statistically significant difference in the association between wage levels and career ( $P < 0.001$ ). Less than one years of experience were less than 200~250 (58.3%), less than 250~300 (18.2%), and less than 150~200 (17.3%), while less than 1~4 years were less than 200~250 (55.4%), less than 250~300 (24.2%), and less than 150~200 (15.4%). Less than 4~6 years were less than 200~250 (55.3%), less than 250~300 (21.5%), less than 150~200 (15.7%). Less than 6~8 years were less than 200~250 (58.9%), less than 250~

300 (21.9%), less than 150~200 (4.8%), and more than 300 (14.4%) ten thousand won. There was statistically significant difference in the association between wage levels and working area ( $P < 0.001$ ). In the metropolitan area, 51.0% were less than 200~250, 31.1% were less than 200~300, 10.7% were more than 300, 58.8% were less than 200~250, 19.9% were less than 150~200, and 15.8% were more than 300 ten thousand won. There was statistically significant difference in the linkage between wage levels and employment status ( $P < 0.001$ ). Regular workers (79.0%) were higher than non-regular workers (64.8%) for less than 200~300 ten thousand won, and non-regular workers (28.9%) were higher than regular workers (13.2%). There was no statistically significant difference in the relationship between wage levels and turnover experience (Table 4).

#### 5. Wage Levels by Gender and Region with Less than 1 Year of Career

Table 5 were demonstrates wage levels by gender and region for full-time workers and less than 1 year of service to confirm the "equal wage for equal value labor" of MTs in secondary medical institutions. For man, the average monthly wage in the metropolitan was 238, and in non-metropolitan, was 231 ten thousand won. For woman, the wage was 240 in the metropolitan and 224 ten thousand won in the non-metropolitan, and the wage gap was relatively larger for woman than man.

In addition, the average monthly desired wage of man in the metropolitan was 301, in non-metropolitan was 293, and that of woman in the metropolitan was

**Table 5.** Wage levels by gender and region with less than 1 year of career

Career	Gender	Region	Monthly wage (ten thousand won)	
			Average	Desired
Less than 1 yr	Man	Metropolitan	237.9	300.5
		Non-metropolitan	230.0	293.0
		Total	232.6	296.1
	Woman	Metropolitan	239.7	299.0
		Non-metropolitan	224.0	276.0
		Total	230.3	285.3
Total			230.6	286.4

299, in non-metropolitan was 276 ten thousand won, and the gap in average monthly desired wage was also relatively larger for woman than man. The average monthly wage for those with less than one year of service was 230 ten thousand won, and the average monthly desired wage was found to be 286 ten thousand won.

## DISCUSSION

Unlike manufacturing and other service industries, the health care industry deals with life and has characteristics of publicity, lack of consumer knowledge, monopoly, unpredictable demand generation, and time mismatch between demand and supply. Human resources problems in the health care sector are expanding not only to labor intensity and health problems of individual workers, but also to problems such as deepening turnover rates, threatening patient safety, risk of medical accidents, and expansion of non-regular workers.

The finding an appropriate level on wage is paramount because wages have a two-sided nature of cost and income [3]. Milkovich et al [10] indicated factors that determine wages, first, the current wage growth level divided by the average wage change rate last year, and second, a financially stable employer maintains a high wage level to gain a competitive advantage in the labor market. Third, the competitive market affects the average wage level in the same industry. Fourth, the effect of turnover was presented [10]. Since worker turnover is typically replaced by low-wage workers, it can be said that it has a cost-effective effect on the average wage and total labor wage equation. However, the current wages of MTs are mainly determined by consultation with hospitals rather than reflecting this basic logic.

The securing of hospital personnel is influenced by supply-side factors such as the supply of the occupational workforce, the level of existing manpower, and their activities, as well as demand-side factors such as internal characteristics and external characteristics of the opening area. From the perspective of hospitals,

which continue to make various efforts to secure, maintain, and manage necessary manpower, wage levels by occupation are likely to show various forms. Considering that wages reflect the degree of importance of the job within the organization, even the same job will show various wage levels depending on the characteristics of the hospital. Another characteristic of the hospital labor market where several occupations work is that the human composition of workers is much more diverse than that of other industries. Based on the diversity of work and the specialization of labor, hospital organizations will be included in one of the most complex organizations.

Hospital personnel consisting of various occupations have both excess demand and excess supply depending on the occupation. In the case of occupations where excessive demand is occurring, it has a relatively high bargaining advantage in relationships with users. There is a unique doctor-centered power structure that only hospitals have. In particular, in the case of private hospitals, there was a tendency to maintain the wages of MTs in previous hospitals regardless of their career. In calculation of appropriate wages, according to data from the Ministry of Employment and Labor, the average wage of all workers in Korea is 243 ten thousand won per month for junior college graduates and 294 ten thousand won for university graduates [11].

According to the labor history and wage status of small and medium-sized hospitals with less than 300 employees, MTs (285 ten thousand won) with six years of experience tend to receive relatively less pay than physical therapists (313 ten thousand won) and radiologists (319 ten thousand won) with the same experience [12]. Even if MTs graduates from a junior college, it is considered appropriate when the monthly wage of more than 270 ten thousand won is average, considering the difference in salary according to academic background.

In the previous survey results, the wage levels of MTs affected job satisfaction, which were also linked to the quality of medical services. Therefore, considering the



expertise and educational background of MTs the starting wage should be determined at least at the average wage level of domestic college graduates, which the wage level should be maintained similar to that of other medical technicians. MTs should break away from the individual approach they have so far and establish a united cooperative system that sticks to the minimum wage around the association in order to receive their rights and proper treatment and restore their pride as experts. Although there are differences depending on the size and nature of the hospital where they work, a desired wage of 34 million won per year needs to be promoted and united at the minimum level of the initial wage.

This study suggests that primary and secondary medical institutions should provide reasonable wages compensation for MTs' work in order to create an environment where MTs can receive stable jobs and work and The Korean Association of Medical Technologists should establish a cooperative system so that the starting wage of MTs in primary and secondary medical institutions can receive a desired wage of 34 million won. The limitation of this study is that the survey was conducted only by the actual condition survey in wage calculation, and the research and analysis were not conducted by subdividing various fields such as the 1st, 2nd, and 3rd relative value scores and quality addition. In subsequent studies, we intend to secure and proceed with these points.

## 요약

본 연구는 한국 16개 시도 1차·2차 의료기관의 임상병리사의 근로실태와 임금수준을 분석하여 희망임금 가이드라인을 제시하고자 한다. 전국 16개 시도 1차·2차 의료기관의 임상병리사 1,327명을 대상으로 2022년 8월 1일부터 2022년 9월 30일 까지 구조화된 구글 설문지를 활용한 설문조사를 실시하였다. 연구 결과, 임금수준은 성별, 연령, 학력, 경력, 직책, 근무지역, 고용형태에 따라 차이가 있는 것으로 나타났다. 경력 1년 미만의 성별, 지역별에 따른 현재의 임금과 희망 임금은 차이가 있으며, 임금의 격차는 상대적으로 여성이 크게 나타났다. 임금만족도, 업무성과에 적합한 임금 및 보상인식, 기술가치 대비 보상에

대한 인식도는 각각 2.01, 2.23, 2.30으로 낮게 나타났다. 본 연구는 1차·2차 의료기관이 임상병리사가 안정적인 일자리와 업무를 제공받을 수 있는 환경을 조성하기 위해 임상병리사 업무에 대한 합당한 임금을 제공해야 하고, 대한임상병리사협회는 1차·2차 의료기관의 임상병리사의 초임임금은 3,400만원의 희망 급여를 받을 수 있도록 협력체계를 구축해야 함을 시사한다.

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- Conceptualization: Kim J, Choi BH.
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- Formal analysis: Kim J, Song CS.
- Methodology: Kim J, Choi BH, Lee S.
- Software: Kim J, Song CS.
- Validation: Kim J, Song CS.
- Investigation: Kim J, Choi BH, Lee S.
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## Ethics approval

This article does not require IRB/IACUC approval because there are no human and animal participants because of KAMT policy.

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