

## Correlation Study on Personal Factors of General and Specialist Dentists Regarding Emergency Management of Traumatic Dental Injuries

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### ABSTRACT

Traumatic dental injuries are increasingly recognized as a significant dental health issue, particularly among children and adolescents. These injuries commonly result from falls, motorbike accidents, sports injuries, or violence. Both general dentists and specialists are responsible for providing emergency care for these injuries, making it essential for them to have sufficient knowledge and experience in managing such cases. This study aims to assess the personal factors influencing the emergency management of traumatic dental injuries among general dentists and specialists in Medan City. A quantitative, cross-sectional design was used, involving a total sample of 300 general and specialist dentists. Data analysis included univariate, bivariate, and multivariate methods. The results showed a significant correlation between knowledge, perception, experience, and work length in managing traumatic dental injuries ( $p < 0.00$ ). However, no correlation was found between age and gender with the ability to manage these injuries ( $p > 0.00$ ). Among the variables, knowledge was identified as the most influential factor. The study concludes that while knowledge, perception, experience, and work duration play a critical role in emergency management, age and gender do not. It is recommended that dentists in Medan continuously enhance their knowledge in this area to ensure effective treatment, reduce patient anxiety, and improve patient satisfaction.

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## INTRODUCTION

A hospital is a place that provides health services to the community, including services for curing diseases and improving public health (Khairunnisa & Arsandrie, 2020). Dentistry is considered the first specialty in medicine. Over time, dentistry and oral health care have evolved from a primitive form of therapy to dental care as a preventive measure for tooth decay with the latest technology and modern treatments (Aryanto, 2021). Dentists must know how their patient's dental condition, diagnosis, and planned treatment can affect their health and dental care. Such information signals that modifications to the standard treatment strategy may be necessary (Little et al., 2017).

Currently, traumatic dental injuries are recognized as a dental health problem in society, especially in children and adolescents. It is reported that 30% of children survive with injuries to primary teeth and 22% to permanent teeth (Al-Haj Ali et al., 2020). Dental injuries are most common in young people, accounting for 17% of

bodily injuries occurring in those aged 0–6 years, compared with an average of 5% across all ages. This occurs more often in men than women. Traumatic dental injuries occur more often in permanent teeth than in primary teeth and usually affect the maxillary front teeth (Duzgun et al., 2020).

The mouth area covers 1% of the body but accounts for 5% of all body injuries. In preschool children, mouth injuries account for 17% of all body injuries. The incidence of traumatic dental injuries is 1%–3%, and the prevalence is stable at 20%–30%. Nearly 30% of preschool-aged children have experienced trauma to their primary teeth. Dental injuries involving permanent teeth occur in nearly 25% of school children and 30% of adults. The incidence varies in different countries and also within the countries themselves. Traumatic dental accidents depend on a person's activity status and also environmental factors, but these are the main predisposing risk factors compared to a person's age and gender. Trauma is the most common cause of permanent incisor loss in childhood. Dental trauma often causes significant complications such

as pulp necrosis, and the long-term prognosis of an injured tooth is almost impossible to predict and often results in long-term restorative problems (Adi et al., 2019). The consensus regarding managing traumatic dental injuries is that the patient should go directly to the hospital and be evaluated by a dentist (Al-Haj Ali et al., 2020).

Dental injury is caused by an impact from sufficient mechanical energy that injures the teeth or other structures around the mouth. This condition is often called Traumatic Dental Injury (TDI). Dental trauma usually occurs due to impacts on complex objects, such as falls while playing, motorbike accidents, injuries during sports, and violence (Myers, 2019).

In its treatment, both general dentists and specialists can provide emergency treatment for traumatic tooth injuries in this disease. Therefore, their perceived knowledge and experience in managing traumatic dental injuries must be adequate. As initial treatment, if mishandled, it can affect the prognosis of many traumatic dental injuries. Several international surveys show that dentists' knowledge of emergency management of traumatic dental injuries still needs to be improved. Two studies investigated this topic in Saudi Arabia; however, the main focus of these studies was to assess dentists' level of knowledge regarding the emergency management of avulsion injuries. General and specialist dentists must have sufficient knowledge about the emergency management of traumatic dental injuries (Alaslami et al., 2018).

Knowledge results from knowing, which occurs after people sense a particular object. Sensing occurs through the five human senses: sight, hearing, smell, taste, and touch. Suppose the acceptance or adoption of new behavior is based on knowledge and positive awareness. In that case, the behavior will last longer than behavior not based on knowledge, which will be temporary or not last long. Therefore, knowledge or cognitive skills are crucial in shaping a person's actions (Munna et al., 2020).

Perception, in general, is the process of acquiring, interpreting, selecting, and organizing sensory information. Perception occurs when a person receives a stimulus from the outside world, captured by his or her supporting organs, which enter the brain. Perception is the process of searching for information to understand using sensory tools. Perception is an internal process of knowing and evaluating the extent to which we know others. In this process, a person's sensitivity to the surrounding environment appears. The way you look will determine the impression resulting from the perception process (Aryanto, 2021).

Experience is an event that is inherent and interconnected with life. Humans can use experience as learning to provide provisions for their daily lives. Therefore, experience is precious. Experience includes things or events that humans experience in their life journey that can be learned and learned by someone. Experience is the result of analysis of the senses possessed by humans; in other words, experience is an event captured by the five senses, stored in memory. It can be obtained and felt when events are new or have been going on for a long time, and it can be shared with anyone to use as guidance or learning (Aryanto, 2021).

Apart from the knowledge, perception, and experience of general and specialized dentists in handling emergency management of traumatic dental injuries in general, several personal factors can influence this, such as the doctor's age, the doctor's gender, and the doctor's length of service. Age is a factor that plays a role in performance. An older member of an organization will be more experienced in completing his work than a young member. However, young members tend to be more sensitive, open, and more flexible towards change and new things. Age is a period since a person existed and can be measured using units of time from a chronological perspective. Ordinary individuals can see the same degree of anatomical and physiological development (Sonang et al., 2019).

Gender is a group of attributes and behaviors culturally formed in men or women. Gender concentrates more on social, cultural, psychological, and non-biological aspects. This type is used to identify differences between men and women in terms of social culture, and gender explains all the attributes of roles and activities related to being a man or a woman (Rahmalia, 2018). Perceptions of individual abilities and skills are influenced by one variable, namely gender, where the abilities and skills of women and men are different (Rudi, 2021).

Work Period is also when someone started working until they started working. A work Period can be interpreted as a relatively long period during which a person enters a business area until a specific time limit (Karim, 2023). A person's tenure will determine individual achievement and organizational performance. Therefore, those who have worked for over five years have sufficient work experience. However, if the work period is less than five years, doing the job will be better and more thorough.

It can be seen that knowledge, perception, experience, age, gender, and length of work influence each other, and there are overlapping

influencing factors. This can be further assessed through research regarding the personal description of general and specialist dentists' factors, including knowledge, perception, experience, age, gender, and length of work regarding emergency management of dental injuries. This research will provide scientific information for other researchers, institutions, or organizations developing research that focuses on the emergency management of traumatic dental injuries. This study aimed to determine the personal factors of general dentists and specialists regarding the emergency management of traumatic dental injuries in Medan City.

## METHOD

The author uses a research design with quantitative research methods. The type of research is quantitative research with a cross-sectional design. Quantitative research has three characteristics in the field. One is that research from start to finish is constant, so it will have the same title as the research report. Developing previously discovered problems. The problem will be different when in the field because it has been confirmed by the reality found (Nurwulandari & Darwin, 2020). In this research, quantitative research aims to determine the extent of the correlation between personal factors of general dentists and specialists regarding the emergency management of traumatic dental injuries in Medan City.

In this research, the data analysis used is univariate, bivariate, and multivariate analysis with data processing using statistical software. In this research, bivariate analysis uses Pearson product moment. This partial correlation analysis is used to determine the strength of the relationship between the correlation of the two variables where other variables considered influential are controlled or made constant. Because the variables studied are interval data, the statistical technique used is Pearson Correlation Product Moment (Priadana & Sunarsi, 2021). Provided that if the Sig value is <0.05, there is a relationship between the independent variable and the dependent variable. Conversely, if the Sig value is >0.05, there is no relationship between the independent and dependent variables. According to Priadana & Sunarsi (2021) Determining the correlation coefficient using the Pearson Product Moment correlation analysis method using the following formula:

$$r_{xy} = \frac{n \sum x_i y_i - (\sum x_i)(\sum y_i)}{\sqrt{\{n \sum x_i^2 - (\sum x_i)^2\} - \{n \sum y_i^2 - (\sum y_i)^2\}}}$$

Information :

- $r_{xy}$  = Correlation Coefficient *Pearson*
- $x_i$  = Independent Variable
- $y_i$  = Dependent variable
- $n$  = Many Samples

From the results obtained with the formula above, we can know the level of influence of variable X and variable Y. In essence, the r value can vary from -1 to +1; mathematically, it can be written as  $-1 \leq r \leq +1$ . The results of the calculations will provide three alternatives, namely:

1. If  $r=0$  or close to 0, the correlation between the two variables is weak, or there is no relationship between variables X and Y.
2. If  $r=+1$  or close to +1, then the correlation between the two variables is strong and in the same direction, and it is said to be positive.
3. If  $r=-1$  or close to -1, the correlation between the two variables is strong, and in the opposite direction, it is said to be negative.

As a material for interpreting the correlation coefficient that is found to be large or small, you can be guided by the following provisions:

**Table 1. Guidelines for providing interpretation of correlation coefficients**

Coefficient interval	Relationship level
0.00 – 0.199	Very weak
0.20 – 0.399	Weak
0.40 – 0.599	Currently
0.60 – 0.799	Strong
0.80 – 1,000	Very strong

## RESULTS

**Table 2. Respondent Characteristics**

Variable	n	%
<b>Age</b>		
26-35 Years	90	30.0
36-45 Years	172	57.3
>45 Years	38	12.7
<b>Gender</b>		
Man	105	35.0
Woman	195	65.0
<b>Last education</b>		
Bachelor	167	55.7
Magister	125	41.7
Doctoral	8	2.7
<b>Type of Profession</b>		
General Dentist	219	73.0
Medical specialist	81	27.0
<b>Length of work</b>		
<5 Years	167	55.7
≥5 years	133	44.3

Source: Primary data processed (2023)

Table 2 explains the research results regarding the frequency distribution of respondent characteristics in this study. There were 90 respondents aged 26-35 with a percentage of 30.0%, 172 respondents aged 36-45 with a rate of 57.3%, and 38 respondents aged >45 with a percentage of 12.7%. There were 105 male respondents, with a percentage of 35.0%, and 195 female respondents, with a rate of 65.0%.

There were 167 respondents with a bachelor's degree, with a percentage of 55.7%, 125 respondents with a master's degree, with a percentage of 41.7%, and 8 respondents with a doctoral degree, with a percentage of 2.7%. There were 219 respondents in the profession of general dentist, with a percentage of 73.0%, and respondents in the profession of specialist were 81 respondents, with a percentage of 27.0%. There were 167 respondents with a length of service <5 years, with a percentage of 55.7%, and respondents with a length of work >5 years were 133 respondents with a percentage of 44.3%.

Table 3 show that the results showed that most respondents had adequate knowledge of several aspects of dental injury management. Still, some areas needed improvement, such as the proper use of splints and the administration of antibiotic therapy after replantation.

Table 4 show although the majority of respondents felt prepared and knowledgeable in the management of traumatic dental injuries, there were indications that the implementation of these actions was still perceived as uneasy and infrequent.

**Table 3. Respondents' answers regarding knowledge of emergency management of traumatic dental injuries**

No	Question	Answer	
		Correct	Wrong
1	Has an intruded primary maxillary anterior tooth been displaced towards the lip bone plate?	221 (73.7%)	79 (26.3%)
2	If a maxillary immature permanent tooth has been intruded, what should the tooth be?	50 (16.7%)	250 (83.3%)
3	If maxillary mature permanent teeth have been removed, should the teeth be immediately repositioned and stabilized?	215 (71.7%)	85 (28.3%)
4	What type of splint should be used for extruded permanent incisors?	41 (13.7%)	259 (86.3%)
5	If a patient with an immature permanent maxillary tooth injury with pinpoint pulp exposure presents to the clinic within 3 hours of the trauma, the treatment procedure is?	215 (71.7%)	85 (28.3%)
6	If a patient with an injured immature permanent maxillary tooth with considerable pulp exposure comes to the clinic 24 hours after the trauma, what is the treatment procedure?	203 (67.7%)	97 (32.3%)
7	If a patient with an injury to a mature permanent maxillary tooth with substantial pulp exposure presents to the clinic more than 24 hours after the trauma, the treatment is?	257 (85.7%)	43 (14.3%)
8	Which of the following storage media is suitable for storing avulsed teeth?	260 (86.7%)	40 (13.3%)
9	Should the avulsed immature tooth be if the patient presents to the clinic within 60 minutes after the trauma, before replantation?	260 (86.7%)	40 (13.3%)
10	If the patient comes to the clinic more than 60 minutes after the trauma, what period do you recommend using a splint for mature teeth?	260 (86.7%)	40 (13.3%)
11	After replantation, do you prescribe antibiotic therapy?	2 (0.7%)	298 (99.3%)
12	Should extracted primary teeth need to be replanted?	260 (86.7%)	40 (13.3%)

Source: Primary data processed in 2023

**Table 4. Respondents' answers regarding the perceptions of general dentists and specialists regarding emergency management of traumatic dental injuries**

No	Question	Answer				
		STS	T.S.	K.S.	S	S.S.
1	Emergency management of traumatic dental injuries can be implemented properly	26 (8.7%)	11 (3.7%)	0	28 (9.3%)	235 (78.3%)
2	Emergency management of traumatic dental injuries can be carried out because the procedures are available	30 (10%)	7 (2.3%)	1 (0.3%)	11 (3.7%)	251 (83.7%)
3	Implementation of emergency management of traumatic dental injuries can be carried out because supporting tools are available	30 (10%)	7 (2.3%)	1 (0.3%)	8 (2.7%)	254 (84.7%)
4	I am ready to carry out emergency management of traumatic dental injuries in patients who come to Medan City	2 (0.7%)	35 (11.7%)	0	245 (81.7%)	18 (6%)
5	Carrying out emergency management of traumatic dental injuries in patients who come to Medan City is easy for me	4 (1.3%)	0	277 (92.3%)	16 (5.3%)	3 (1%)
6	I find emergency management of traumatic dental injuries easy to perform	1 (0.3%)	5 (1.7%)	278 (92.7%)	12 (4%)	4 (1.3%)
7	I have mastered the knowledge in dealing with emergency management of traumatic dental injuries	1 (0.3%)	36 (12%)	2 (0.7%)	252 (84%)	9 (3%)
8	Emergency management of traumatic dental injuries is something I do frequently	0	7 (2.3%)	277 (92.3%)	14 (4.7%)	2 (0.7%)
9	I feel confident in carrying out emergency management of traumatic dental injuries	2 (0.7%)	35 (11.7%)	6 (2%)	249 (83%)	8 (2.7%)
10	Emergency management of traumatic dental injuries can be carried out well if the doctor has experience in carrying out emergency management of traumatic dental injuries	28 (9.3%)	9 (3%)	0	25 (8.3%)	238 (79.3%)

Source: Primary data processed in 2023

Table 5 reveal that 184 general dentists (61.3%) demonstrated good knowledge, while 35 general dentists (11.7%) showed poor knowledge. Among specialist dentists, 76 (25.3%) had good understanding, and only 5 (1.7%) had inadequate knowledge.

Regarding perception, 188 general dentists (62.7%) exhibited a positive perception, whereas 31 general dentists (10.3%) had an unfavorable perception. For specialist dentists, 75 (25%) held good perceptions, while 6 (2%) had unfavorable ones.

Regarding experience, 184 general dentists (61.3%) had substantial experience, with 35 general dentists (11.7%) reporting less experience. Among specialist dentists, 76 (25.3%) had good experience, and 5 (1.7%) had less experience.

Lastly, the data indicate that 187 general dentists (62.3%) demonstrated good dental emergency management skills, while 32 general dentists (10.7%) had less favorable skills. Among specialist dentists, 74 (24.7%) had good management skills, and 7 (2.3%) displayed weaker capabilities in managing dental emergencies.

**Table 5. Results of Univariate Analysis**

Knowledge	Good		Not good		Total	
	n	%	n	%	n	%
General dentist	184	61.3	35	11.7	219	73
Specialist dentist	76	25.3	5	1.7	81	27
<b>Perception</b>						
General dentist	188	62.7	31	10.3	219	73
Specialist dentist	75	25	6	2	81	27
<b>Experience</b>						
General dentist	184	61.3	35	11.7	219	73
Specialist dentist	76	25.3	5	1.7	81	27
<b>Dental emergency management</b>						
General dentist	187	62.3	187	62.3	187	62.3
Specialist dentist	74	24.7	74	24.7	74	24.7

Source: Primary data processed in 2023

**Table 6. Correlation of age, gender, length of work, knowledge, perception, and experience of general dentists and specialists on emergency management of traumatic dental injuries in Medan City**

Variable	Sig. (2-tailed)	Pearson Correlation
Age against emergency management of traumatic dental injuries	0.104	-0.165
Gender against emergency management of traumatic dental injuries	0.544	-0.035
Length of work against emergency management of traumatic dental injuries	0.000	0.202
Knowledge of emergency management of traumatic dental injuries	0.000	0.600
Perception of emergency management of traumatic dental injuries	0.000	0.528
Experience against emergency management of traumatic dental injuries	0.000	0.588

Source: Primary data processed in 2023

Table 6 illustrates that the correlation coefficient ( $r=-0.165$ ) between the ages of general dentists and specialists and their ability to manage traumatic dental injuries in Medan City is not significant, as indicated by a p-value greater than 0.05 (0.104). This suggests no meaningful relationship between dentists' ages and their performance in managing these dental emergencies.

Additionally, the correlation coefficient between gender and emergency management of traumatic dental injuries is  $r=-0.035$ , which is also insignificant, with a p-value of 0.544 ( $p>0.05$ ). This indicates that gender does not influence dentists' ability to manage traumatic dental injuries.

However, a significant correlation ( $r=0.202$ ) exists between the length of work experience and emergency management, with a p-value of 0.000 ( $p<0.05$ ). Although the relationship is weak, it implies that more extended work experience is associated with better emergency management skills.

There is a solid and significant correlation ( $r=0.600$ ) between the knowledge of general dentists and specialists and their ability to manage traumatic dental injuries, supported by a p-value

of less than 0.05 (0.000). This shows a strong link between higher knowledge levels and effective management.

Similarly, perceptions of dentists regarding traumatic dental injury management have a moderate, significant correlation ( $r=0.528$ ) with a p-value of less than 0.05, indicating that dentists' perceptions also influence their performance.

Lastly, the correlation between experience and the ability to manage traumatic dental injuries is moderate ( $r=0.588$ ) and significant ( $p<0.05$ ). This suggests that the more experience a dentist has, the better they manage such emergencies.

**Table 7. Variable selection for multivariate analysis**

Variable	P-Value	Candidate
Knowledge (X1)	0.000	Yes
Perception (X2)	0.000	Yes
Experience (X3)	0.000	Yes
Age (X4)	0.104	No
Gender (X5)	0.544	No
Length of Work (X6)	0.000	Yes

Source: Primary data processed in 2023

Table 7 shows that the independent variables in this study, which have a p-value  $<0.05$ , are the variables of knowledge, perception, experience, and length of work. From these results, the independent variables included in the multivariate testing model in Table 8 below are the variables of knowledge, perception, experience, and length of work:

**Table 8. Multivariate analysis results**

Variable	F	Sig
Knowledge (X1)		
Perception (X2)		
Experience (X3)	40,597	0,000
Length of Work (X6)		

Source: Primary data processed in 2023

Table 8 explains the results of the multivariate analysis of the variables of knowledge, perception, experience, and length of work regarding the emergency management of traumatic dental injuries in Medan City. From the table, it can be seen that the significance value is  $0.000<0.05$ , which means that the independent variables are knowledge, perception, experience, and length of work in this research together or simultaneously have a relationship or correlation with the dependent variable, namely the emergency management of traumatic dental injuries in Medan City.

**Table 9. Independent variables that have the most influence on the dependent variable**

Variable	t
Knowledge (X1)	4,536
Perception (X2)	1,077
Experience (X3)	3,578
Length of Work (X6)	0.904

Source: Primary data processed in 2023

Table 9 explains the results regarding the independent variable most related to the dependent variable. The research results show that the knowledge variable (X1) has the highest t value, 4.536. From these results, it can be concluded that the independent variable most related to the dependent variable in this research is the knowledge variable (X1).

## DISCUSSION

### Correlation of knowledge of general dentists and specialists on emergency management of traumatic dental injuries

These results show that most general and specialist dentists in Medan know well about the emergency management of traumatic dental injuries. There is a correlation or relationship between the knowledge of general dentists and specialists regarding the emergency management of traumatic dental injuries in Medan City.

Extensive knowledge about the emergency management of traumatic dental injuries is necessary to determine the pattern of intervention given to the patient. What is no less important is that dentists and specialists must also recognize all indications or causes in their surroundings that have the potential to be factors causing traumatic tooth injuries. This aims to ensure that patients can anticipate the occurrence of traumatic tooth injuries. Overall, general and specialist dentists are responsible and committed to disease prevention and health promotion, one of which is evaluating patients' understanding of the dangers of traumatic dental injuries and how to prevent them. In carrying out all this, general and specialist dentists must have adequate knowledge to provide a good understanding and handle emergency incidents of traumatic dental injuries properly. This study concludes that the better general dentists and specialists understand the emergency management of traumatic dental injuries, the better general dentists and specialists will be in treating traumatic dental injuries.

Knowledge or cognition is dominant and essential for forming a person's actions/overt

behavior (Hendrawan, 2019). Knowledge results from finding out, not knowing to know, and being unable to become able. This discovery process includes various methods and concepts through education and experience. The main characteristic of the level of knowledge is memory about something that one knows through experience, learning, or information received from other people. Knowledge begins with curiosity within humans. Knowledge has been obtained from asking questions and always aims to find the truth (Ridwan et al., 2021).

### Correlation of general and specialist dentists' perceptions of emergency management of traumatic dental injuries

The research results, most general and specialist dentists in Medan have an excellent perception of the emergency management of traumatic dental injuries. There is a correlation or relationship between the perceptions of general dentists and specialists regarding the emergency management of traumatic dental injuries in Medan City.

Perception is a process of conveying relevant information captured by the five senses from the environment, which then organizes it in the mind, interprets, experiences, and processes everything that happens in the environment. However, everything will influence perception because perception can be said to be the first event in a series of processes towards changing the stimulus into action or as a meaningful sensation. Therefore, in this study, the better the perception of general dentists and specialists regarding emergency management of traumatic dental injuries, the better general dentists and specialists will be in treating traumatic dental injuries.

Perception is part of the life process in which every person assesses what they see and then carries out thinking activities to decide what to do. It results from the brain's work in understanding or assessing things around it. Perception studies aim to identify human experiences of the world (Sumarandak et al., 2021).

Perception is one of the factors that influence doctors to take medical action. According to Kotler and Keller (2016), perception is a process of selecting, organizing, and translating input information to create a meaningful picture of the world. The main point is that perception depends not only on physical stimuli but also on the relationship of stimuli to the surrounding field and the inner states of each of us.

### **Correlation of the experience of general dentists and specialists in the emergency management of traumatic dental injuries**

The research results show that most general and specialist dentists in the city of Medan have good experience in the emergency management of traumatic dental injuries. There is a correlation or relationship between the experience of general dentists and specialists in the emergency management of traumatic dental injuries in Medan City.

Experience is one of the supporting factors for each individual or group in the field of work they are involved in. The more experience a person has, the more skills a person has. Experience is all the events that have been experienced in life. Apart from that, experience is also understood as a process of gaining knowledge, insight, attitudes, and skills. This indicates that experience is related to the time and conditions experienced by a person in pursuing a field, from the ongoing and numerous processes of experience, a person will learn about conditions, situations and problems along with solutions to each issue. Therefore, in this study, the better the experience of general dentists and specialists regarding emergency management of traumatic dental injuries, the better general dentists and specialists will be in treating traumatic dental injuries.

A person's work experience helps them gain specific skills and knowledge appropriate for their work. People who repeat a specific type of work over a long period will get used to the job and master it. This relates to Simanjuntak's (2005) theory that work experience can deepen and broaden work abilities. The more often a person does the same job, the more skilled he is and the faster he completes the job. The more types of work a person does, the more affluent and broader his work experience will be, and it will be possible to improve his work (Irawati et al., 2022).

### **Correlation of age of general dentists and specialists on emergency management of traumatic dental injuries**

Result shows no correlation or relationship between the age of general dentists and specialists in the emergency management of traumatic dental injuries in Medan City. According to Rizal (2020), those in the young category still need guidance in providing health services with discipline and must instill a sense of responsibility, while those in the older category have responsibility for their work

because they are more experienced and responsive. The age of the workforce is sufficient to determine success in carrying out a physical and non-physical job. Older workers generally have weak and limited physical strength, whereas young workers have strong physical abilities. Employee age is one of several factors that influence productivity. Productive workers usually produce more than ordinary workers. Younger individuals due to physical constraints and restrictions of older employees" (Meutia et al., 2022).

### **Correlation of gender of general dentists and specialists on emergency management of traumatic dental injuries**

Result shows that there is no correlation or relationship between the gender of general dentists and specialists in the emergency management of traumatic dental injuries in Medan City. This is supported by the Caplan & Caplan (2015) statement, which states that a person's gender cannot be used as a judgment in acting because the gender of a person's skills in doing something is not an individual characteristic but rather a manifestation of a person's talents and abilities.

### **Correlation of length of work by general dentists and specialists on emergency management of traumatic dental injuries**

The results of research shows a correlation or relationship between the length of work of general dentists and specialists in the emergency management of traumatic dental injuries in Medan City. The work period of a general and specialist dentist is the work period of a doctor from when he first started work until now. A doctor's length of service can influence the doctor's experience, especially general dentists and specialists in dealing with emergency management of traumatic dental injuries.

This study concludes that the longer general dentists and specialists work, the better they will handle the emergency management of traumatic dental injuries. A long working period will make a person feel more at home in an organization. This is due, among other things, to having adapted to the environment long enough so that a worker will feel comfortable with their work. The working period is a factor in individual behavior and perceptions influencing career development. The idea is that the longer someone works, the better their work abilities will be, and the mastery of their work will become more fluent (Jayanti & Dewi, 2021).



## CONCLUSION

The conclusion of this study showed that age and gender did not significantly correlate with the ability to manage traumatic dental injury emergencies. However, there was a significant correlation between dentists' length of service, knowledge, perception, and experience, and their ability to manage traumatic dental injuries. Good knowledge and experience were shown to improve the quality of emergency dental injury

management, both in general dentists and specialists.

Dentists, especially new ones, should continuously improve their knowledge and skills in dental injury emergency management through training and continuing education. Related institutions are also expected to provide support in the form of adequate tools and facilities to implement emergency procedures. In addition, increased educational programs and seminars on traumatic dental injury management will help dentists provide better patient care.

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