

RESEARCH ARTICLE

## NURSES' ATTITUDE TOWARD PEDIATRIC END OF LIFE CARE AT HIWA CANCER HOSPITAL IN SULAIMANY-IRAQ

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### ABSTRACT

**Background:** End-of-life care refers to all aspects of the care relating to dying, and bereavement which are provided towards the end of life, end of life care is nowadays essential in nursing care, due to the increasing number of patients who require attention in the final stages of their life, the negative attitude among nurses is one of the most common barriers to the quality end of life care.

**Objective:** To assess attitude of the nurses working at Hiwa Cancer Hospital toward pediatric end of life care in Sulaimani city.

**Methods:** Quantitative Method / Descriptive Cross-Sectional Study has been carried out on (111) nurses working in Hiwa cancer hospital. Data were collected using standard questionnaires (Frommelt Attitude toward Care of the Dying scale ) data analyzed using statistical package of social science version (24).

**Results:** The findings of present study demonstrate that 57.3% of nurses had good attitude, 14.2% fair attitude and 28.3% poor attitude toward end of life care , with the total mean and standard deviation (2.345±0.68) which indicated that nurses have good level of attitude as general, results show that level of education, work place, received training course about end of life care, attending seminar, workshop about pediatric end of life care had significant association with the attitude of nurses towards pediatric end of life care.

**Conclusion and Recommendation:** Overall nurses have good attitude about end of life care. It's essential for nurses who were at fair or poor attitude about end of life care to be familiarized with the concepts of end-of-life care through trainings, workshops and formal or informal education in both academic and hospital settings.

**Key words:** Attitude, Nurses, End of life care



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## INTRODUCTION

End-of-life care (EoLC) refers to all parts of care linked to dying, and grief that are offered towards the end of a person's life. People who are nearing the end of their lives and have stopped treatment to cure or control their disease are considered to be in need of end-of-life care. Palliative care and hospice care are two models of end-of-life care. End-of-life care aims to prevent or relieve suffering by managing pain and other symptoms as well as providing psychological, social, spiritual, and physical support. 57.4 million people die each year in the world, with a significant proportion of their deaths being accompanied by suffering that requires high-quality and compassionate end of life care (Abate et al., 2019).

In pediatrics, end-of-life care is defined as the support and care offered to the child and family when a child's clinical condition has progressed to the point that the child is dying or is expected to die soon. Every year in the United State, 20,000 children aged 1 to 18 years die from severe disease and they do not get high-quality end-of-life care. (Johnston et al., 2017).

Life-threatening diseases like cancer cause a decrease in the quality of life and they bring about various problems including physical, mental, and spiritual issues, as well as pain, in patients with diseases that cannot be treated despite the advances in medicine, approaches aiming at reducing the patient's distress and improving the quality of life should be applied, in accordance with this view, the approach of end of life care has been developed in order to meet the needs of patients and their relatives (Bilal, 2018).

Nurses spend more time with patients and families than other professions, according to a comprehensive study published in 2016, nurses are the most prevalent interventionists working in teams or as solo practitioners, Nurses' feelings of inadequate preparation and stress lead to the development of negative attitudes about death and caring for the dying, which may have an impact on the standard of care (Etafa et al., 2020).

One of the most essential variables impacting delivery of palliative health care is the knowledge, attitudes, beliefs, and experiences of health care providers, which influence not only their method but also their behavior during patient assessment and treatment. Nurses are the most important members of the team because they deal with the physical, functional, social, and spiritual aspects of care of the pediatric patients (Ayed, 2015).

Personal characteristics of nurses like age, years of work experience in nursing, end-of-life care training, educational level, and direct experience in caring for a dying patient or family member are described in a systematic review article as personal factors associated with better knowledge of end-of-life care and more positive attitudes toward end of life care (Prompahakul et al., 2020).

## METHOD

**Design of the study:** Quantitative Method / Descriptive Cross-Sectional Study have been employed to undertake this research.

**Setting of the study :** This study was carried out at Hiwa Cancer Hospital, this hospital is the only hospital in Sulaimani City that receives patients with oncology and hematology disorders, all services offered in the hospital are free of charge for every patient. It has 142 beds and fifteen inpatient and outpatient wards, three of which are dedicated to pediatric patients and offer diagnostic, management, and follow-up care.

**Sample and Sampling process:** Convenient sample technique will be used for the purpose of data collection, sample size of (111) nurses selected to participate in current study for data collection ,the nurses were chosen according to inclusion criteria which are nurses work in Hiwa cancer hospital, and nurses willing to participate in the study.

**Tools of the study:** A questionnaire form was used for data collection consist of two parts: part one developed by the researcher composed of nurses' socio-demographic characteristics, and nurse's familiarity concerning their professional experience and part two was standard tool about Frommelt Attitudes Towards Care of the Dying (FATCOD) which consist of 24 items with 5 point Likert scale. 1 = strongly disagree, 2 = disagree, 3 = unsure, 4 = agree, and 5 = strongly agree. 12 of the items were written positively and the rest 12 items written negatively, the score of negative items were reversed to calculate the attitude.

Items	Scales	Scores	Weight average (mean)	Results
Attitudes for (24) questions	Poor attitudes	1	1.0 – 1.66	Poor attitudes
	Fair attitudes	2	1.66 – 2.33	Fair attitudes
	Good attitudes	3	2.34 – 3.00	Good attitudes

## Statistical analysis

The collected data were compiled and analysed using percentages, mean, median, and Chi-square tests using SPSS version 20. P values of 0.05 were

used as a cut-off point for the significance of the statistical test.

**RESULTS**

Table (1) shows that majority of sample their age ranged between 26-35 years old which account 57.7%, while only 12.6% of sample their age was less than 26 years old, about gender highest percentage of sample 56.8% were female and the rest of sample was male. 52.3% of the participants were graduated from technical institute follow by 35.1% of sample graduated from college, and only 5.4%of sample was graduated from preparatory nursing school.

Table (2) represents the nurse's familiarity according to their professional experience. the highest percentage of the sample 69.4% their experience in nursing as general ranged between one to ten years, as well as only 9.9% of sample their experience was more than 20 years, while nurses experience in palliative care record only 30.6% among that 73.5% of them were had experience about 1-3 years and lowest percentage of them which account 26.5%were had experience about 4-6 years.

in regard to nurses workplace highest percentage of the sample which accounts 21.6% were working in pediatric ward, it's worth to mention that only a few percentages 5.4% of nurses were working in the palliative care unit,

Concerning the care of patients at end of life stage, the highest percentage of nurses 81.1% cared for patients at end of life stage, and only 18.9%were not faced with any patients at end of life stage.

Regarding nurses attending training courses about the end of life care, only 28.8% of the sample were attended training courses about the end of life care and among those 23.4%of them

were attended training courses inside the country, about the duration of course 59.38 %of sample their course was about 1 to 5 days.

In addition to that highest percentage of sample, 65.8% never read article or brusher about the end of life care, as well as 79.3% of the sample, were not attended any seminar or workshop about the pediatric end of life care.

Table (3) reveal the distribution of nurses according to their attitude in five Likert scales and in three level of attitude, it shows that out of twenty-four items nurses have good attitude in twelve items, fair attitude in nine-item and poor attitude in three items, with total mean and standard deviation 2.345±0.68 and good level of attitude in general.

Table (4) shows that statistically significant association were found between nurses attitude about end of life care with level of education (p=0.015) because the result of the p-value was less than the common alpha 0.05. But there were no statistically significant association between nurses attitude about end of life care with gender (p=0.225), age (p=0.346) and years of experience (p=0.277).

Table (5) Explore the association between nurse's attitude about end of life care and nurse's familiarity according to their professional experience .it shows that statistically highly significant association were found between nurse's attitude with nurses work place, while significant association found between receiving training course(p=0.006), ,and attending seminar or workshop (p=0.006), about end of life care with nurses attitude , statistically no significant association were found between nurses attitude with nurses experience of working in palliative care unit, care for patients at the end of life stage, read articles/brochures/books about end of life care.

Table 1. Distribution of the sample according to their Socio demographic characteristics

Variables	Items	Frequency	%
Age	>26 years old	14	12.6
	26-35 years old	64	57.7
	<35 years old	33	29.7
	Mean ±S.D	33.35 ~35 ± 7.93	
Gender	Male	48	43.2
	Female	63	56.8
Level of education / graduated from	Preparatory nursing school	6	5.4
	Institute	58	52.3
	College	39	35.1
	Higher education	8	7.2
<b>Total</b>		<b>111</b>	<b>100</b>

Table 2. Distribution of nurse's familiarity according to their professional experience

Variables	Items	Frequency	%
Years of experience in nursing professional	1 – 10 years	75	67.6
	11 – 20 years	25	22.5
	More than 20 years	11	9.9

		Mean ±S.D	10.38 ~ 10 ± 7.44
<b>Do you have an experience of working in palliative care unit?</b>	Yes	34	30.6
	No	77	69.4
<b>If yes How long your experience?</b>	1 – 3	25	73.5
	4 – 6	9	26.5
<b>working place</b>	Pediatric	24	21.6
	Pediatric outpatient	4	3.6
	Pediatric isolation	5	4.5
	Oncology	14	12.6
	Hematology	16	14.4
	Male outpatient	12	10.8
	Female outpatient	13	11.7
	BMT	12	10.8
	Adult isolation	5	4.5
	Palliative	6	5.4
<b>Have you ever attended or received training about end of life care?</b>	Yes	32	28.8
	No	79	71.2
<b>If yes Where did you attend training about end of life care?</b>	Inside country	26	23.4
	Outside country	6	5.4
	<b>How many days</b>		
	1 -5 days	19	59.38
	More than 5 days	13	40.63
<b>Did you care for patients at the end of life stage?</b>	Yes	90	81.1
	No	21	18.9
<b>Have you ever read articles/brochures/books about end of life care?</b>	Yes	38	34.2
	No	73	65.8
<b>Have you ever attended any seminar, workshop about pediatric end of life care?</b>	Yes	23	20.7
	No	88	79.3
<b>Total</b>		<b>111</b>	<b>100</b>

Table 3. distribution of sample concerning nurse's attitude about end of life care

Questions	SDA	DA	UN	AG	SAG	Mean (S.D)	P.A	F.A	G.A	Mean (S.D)	L.A
	F %	F %	F %	F %	F %		F %	F %	F %		
1. Palliative care is given only for dying patient.	6	16	29	40	20	3.47	60	29	22	1.66	P.A
	5.4	14.4	26.1	36	18	(1.11)	54.1	26.1	19.8	(0.79)	
2.As a patient nears death; the nurse should withdraw from his/her involvement	32	58	11	4	6	2.05	10	11	90	2.72	G.A
	28.8	52.3	9.9	3.6	5.4	(1.01)	9	9.9	81.1	(0.62)	
3. Giving nursing care to the chronically sick patient is a worthwhile learning experience.	2	1	10	50	48	4.27	3	10	98	2.86	G.A
	1.8	0.9	9	45	43.2	(0.8)	2.7	9	88.3	(0.42)	
4.It is beneficial for the chronically sick person to verbalize his/her feelings	0	2	6	43	60	4.45	2	6	103	2.91	G.A
	0.0	1.8	5.4	38.7	54.1	(0.68)	1.8	5.4	92.8	(0.34)	
5. Family members who stay close to a dying person often interfere with a professionals' job with the patient.	1	6	24	47	33	3.94	7	24	80	2.66	G.A
	0.9	5.4	21.6	42.3	29.7	(0.92)	6.3	21.6	72.1	(0.6)	
6. The length of time required to give nursing care to a dying person would frustrate me.	8	52	23	21	7	2.7	28	23	60	2.29	F.A
	7.2	46.8	20.7	18.9	6.3	(1.05)	25.2	20.7	54.1	(0.85)	
7.Families should be concerned about helping their dying member to make the best of his/her remaining life.	1	2	5	45	58	4.41	3	5	103	2.9	G.A
	0.9	1.8	4.5	40.5	52.3	(0.74)	2.7	4.5	92.8	(0.38)	
8.Family should maintain as normal an environment as possible for their dying member	0	1	4	54	52	4.41	1	4	106	2.95	G.A
	0	0.9	3.6	48.6	46.8	(0.61)	0.9	3.6	95.5	(0.26)	
9.The nurse should not be the one to talk about death with the dying person.	0	4	10	35	62	4.39	4	10	97	2.84	G.A
	0	3.6	9	31.5	55.9	(0.8)	3.6	9	87.4	(0.46)	
10.The family should be involved in the physical care of the dying person.	0	6	7	47	51	4.28	98	7	6	1.17	P.A
	0	5.4	6.3	42.3	45.9	(0.81)	88.3	6.3	5.4	(0.5)	
11.It is difficult to form a close relationship with the family of a dying member.	9	35	37	22	8	2.86	30	37	44	2.19	F.A
	8.1	31.5	33.3	19.8	7.2	(1.06)	27	33.3	39.6	(0.81)	
12.There are times when death is welcomed by the dying person	6	23	32	37	13	3.25	29	32	50	2.19	F.A
	5.4	20.7	28.8	33.3	11.7	(1.08)	26.1	28.8	45	(0.83)	
13.Nursing care for the patient's family should continue throughout the period of grief and bereavement.	29	42	17	13	10	2.39	71	17	23	1.59	G.A
	26.1	37.8	15.3	11.7	9	(1.25)	64	15.3	20.7	(0.82)	
14.The dying person and his/her family should be the in-charge decision makers.	1	7	10	39	54	4.24	8	10	93	2.88	G.A
	0.9	6.3	9	35.1	48.6	(0.93)	7.2	9	83.8	(0.57)	
15.Addiction to pain relieving medication should not be a nursing concern when dealing with a dying person.	2	12	9	53	35	3.96	14	9	88	2.86	G.A
	1.8	10.8	8.1	47.7	31.5	(1.0)	12.6	8.1	79.3	(0.69)	
16.Nursing care should extend to the family of the dying person	3	20	28	41	19	3.47	23	28	60	2.64	F.A
	2.7	18	25.2	36.9	17.1	(1.06)	20.7	25.2	54.1	(0.8)	
	0	7	4	48	52	4.31	100	4	7	1.17	P.A

17. When a patient asks, "Nurse am I dying? I think it is best to change the subject to something cheerful.	0.0	6.3	3.6	43.2	46.8	(0.82)	90.1	3.6	6.3	(0.51)	
18. I am afraid to become friends with chronically sick and dying patients	8	36	27	31	9	2.97	40	27	44	2.05	F.A
19. I would be uncomfortable if I entered the room of a terminally ill person and found him/her crying	7.2	32.4	24.3	27.9	8.1	(1.1)	36	24.3	39.6	(0.87)	F.A
20. I would be uncomfortable talking about impending death with the dying Person	6	48	10	34	13	3.00	47	10	54	2.07	F.A
21. It is possible for nurses to help patients prepare for d	5.4	43.2	9	30.6	11.7	(1.2)	42.3	9	48.6	(0.96)	F.A
22. Death is not the worst thing that can happen to a person	3	31	13	40	24	3.46	64	13	34	1.73	F.A
23. I would feel like running away when the person actually died	2.7	27.9	11.7	36	21.6	(1.19)	57.7	11.7	30.6	(0.9)	F.A
24. I would not want to be assigned to care for a dying person	1	13	20	45	32	3.85	14	20	77	2.85	G.A
Sum: nurse's attitude about end of life care	0.9	11.7	18	40.5	28.8	(1.01)	12.6	18	69.4	(0.71)	G.A
	6	21	14	44	26	3.57	27	14	70	2.69	G.A
	5.4	18.9	12.6	39.6	23.4	(1.2)	24.3	12.6	63.1	(0.85)	G.A
	15	47	15	21	13	2.73	34	15	62	2.25	F.A
	13.5	42.3	13.5	18.9	11.7	(1.25)	30.6	13.5	55.9	(0.9)	F.A
	17	40	15	25	14	2.81	39	15	57	2.16	F.A
	15.3	36	13.5	22.5	12.6	(1.3)	35.1	13.5	51.4	(0.92)	F.A
	156	530	380	879	719	3.55	756	380	1528	2.345	F.A
	5.86	19.8	14.2	33	26.99	(1.25)	28.3	14.2	57.3	(0.68)	F.A

Note: SA=strongly agree, AG=agree, UN=unsure, DA=disagree and SDA= strongly disagree S.D: Stander deviation, P.A : Poor attitudes, F.A: Fair attitudes, G.A: Good attitudes. L.A: level of attitude  
 Weight average (mean) for 3point Likert scales: 1.0-1.66 : Poor attitudes , 1.67-2.33: Fair attitudes, 2.34-3.0: Good attitudes

Table 4. Association between nurse's attitude about end of life care and their Socio demographic characteristics

items	N	Mean	S.D	Significant test	P-value
<b>Age</b>					
>26 years old	14	2.2649	0.15980	1.07 **	0.346
26-35 years old	64	2.3132	0.19345		
<35 years old	33	2.2551	0.21794		
<b>Gender</b>					
Male	48	2.3160	0.20875	1.222 *	0.225
Female	63	2.2698	0.18781		
<b>Level of education</b>					
Preparatory nursing school	6	2.0972	0.20861	3.627 **	0.015
Institute	58	2.2658	0.18680		
College	39	2.3472	0.19644		
Higher education	8	2.3281	0.17878		
Note // * is the parametric Test (In dependent samples T-Test) ** is the is the parametric Test (One Way ANOVA -F-Test)					

Table 5. Association between nurse's attitude about end of life care and nurse's familiarity according to their professional experience

Items	N	Mean	S.D	Significant test	P-value
<b>Years of experience in nursing professional \ employment</b>					
1 – 10 years old	75	2.2928	0.19289	1.301*	0.277
11 – 20 years old	25	2.3183	0.19465		
More than 20 years old	11	2.2045	0.23008		
<b>Do you have an experience of working in palliative care unit?</b>					
Yes	34	2.3365	0.18006	1.557 *	0.122
No	77	2.2727	0.20654		
<b>Work place</b>					
Pediatric	24	2.2708	0.23183	3.843*	0.000
Pediatric outpatient	4	2.2500	0.12266		
Pediatric isolation	5	2.2750	0.13372		
Oncology	14	2.6660	0.38119		
Hematology	16	2.5920	0.38925		
Male outpatient	12	2.5314	0.37697		
Female out patient	13	2.3971	0.22656		
BMT	12	2.2361	0.29212		
Adult isolation	5	2.2833	0.09033		
Palliative	6	2.1806	0.19837		
<b>Have you ever attended or received training about end of life care?</b>					
Yes	32	2.3698	0.19479	2.798 *	0.006
No	79	2.2574	0.19045		
<b>Did you care for patients at the end of life stage?</b>					
Yes	90	2.2903	0.20664	0.054 *	0.957
No	21	2.2877	0.15696		
<b>Have you ever read articles/brochures/books about end of life care?</b>					
Yes	38	2.3140	0.27348	1.122 *	0.264
No	73	2.2631	0.19860		
<b>Have you ever attended any seminar, workshop about pediatric end of life care?</b>					
Yes	23	2.3779	0.23897	2.198 *	0.03
No	88	2.2597	0.22730		
Note // * is the parametric Test (In dependent samples T-Test)					

## DISCUSSION

Concerning the nurses' profile, the analysis clearly indicates that more than half of the samples were female and their age ranged between (26-35) years old, with a mean of (33.35). These findings concur with the findings of a study conducted in Turkey by (Cevik & Kav, 2013), who stated that the proportion of female nurses was higher than the proportion of male nurses, and the highest percentage of their sample's age ranged between (26-30) years old. The researchers' point of view is that nursing professionals are more acceptable by female .

Due to the fact that there have been no nurses graduating from preparatory schools of nursing in the last two decades, more than half of the nurses graduated from nursing institutes, followed by college nurses, who accounted for more than one third of the sample, and only a small percentage of the sample graduated from preparatory schools of nursing. These findings are consistent with a study done in Rwanda by (Marie Claire, 2017) in their study; the highest percentage of the sample has a diploma degree in nursing.

In terms of nurse familiarity related to professional experience, approximately two-thirds of the sample had experience in nursing ranging from one to ten years with a mean of (10.38), whereas a study conducted in Kazakhstan (Tereshkova, 2021) found that the majority of their sample had twenty to twenty-nine years of experience, which contradicts the current finding. Unfortunately, more than two-thirds of the sample did not work in the palliative care unit. Their experience ranged between one to three years due to the fact that the palliative care unit was established about six years ago. It's a new unit in Hiwa Cancer Hospital. , in a study done in Indonesia by (A'la et al., 2020) found that more than half of their sample had five to ten years of experience in nursing. and the majority of nurses had experience in caring for end of life patients.

regarding nurses workplace, more than one quarter of the nurses were working in different units of the pediatric ward, like the inpatient unit, outpatient unit, and isolation unit, ,and the rest of the nurses were working in different units in Hiwa Cancer Hospital, such as the oncology unit , hematology unit , male and female outpatient units,... etc. The findings consistence with the results of study done in Taiwan by (Lin et al., 2021). They found that around one quarter of the nurses work in pediatric wards, and the majority of nurses care for patients at the end of life stage. less than one third of sample were participated in training courses, and more than half of them their training course were ranged between only one to five days which is done mostly inside the country , this result disagree with the findings of study done by (Ayed, A,2015) they found that more than half of nurses had obtained training course

and the majority of them were trained for less than 1 week.

The analysis revealed that the total mean and standard deviation in all twenty-four items of nurses' attitude toward end-of-life care was (2.35±0.68), indicating that nurses in Hiwa Cancer Hospital have a positive attitude toward end-of-life care. The same findings reveal that nurses have a positive attitude in twelve items, a fair attitude in nine items, and a negative attitude in three items.

Majority of participants were agreed to statements "Family should maintain as normal an environment as possible for their dying member", and "It is beneficial for the chronically sick person to verbalize his/her feelings". Only few percentage of the participants agreed to statements that "The family should be involved in the physical care of the dying person" and "When a patient asks, "Nurse am I dying? 'I think it is best to change the subject to something cheerful".

The findings of this study were congruent with a study done in Pakistan by (Parveen et al., 2020) which illustrated that most of the nurses had a favorable attitude towards end of life care. These findings were not confirmed by another study done in Sudan (Bilal, 2018). According to their results, most respondents' attitudes levels towards palliative care were moderate attitudes, but the present findings disagree with the results of another study done by (Faronbi et al., 2021) which showed that most nurses had a negative attitude towards end of life care.

The difference in mean scores may be due to the variation of beliefs and cultures among nursing staff across regions, which needs to be investigated. Another reason might be the variation in training provided for professionals in different areas.

Based on analysis for demographic data age, gender, doesn't reflect any significant association on the nurse's attitude toward palliative care, while statistically significant association were found between nurses attitude and nurses level of education at p value 0.015, this result congruent with a study done in 2019 they mention that significant association found between nurses attitude and level of education (Gedamu et al. 2019) .

In this study, no significant association was found between nurses' attitude towards end of life care with nurse's experience ,nurses' work place, while a statistically significant association was found between nurses' attitude towards end of life care with nurses who had received training course about end of life care. This result agrees with the findings of the study done by (Zewdu et al., 2017) In their results, nurses who had been trained had more likely two times favorable attitude towards end of life care as compared to those who had not been trained, but their results are inconsistent with the present study in terms of nursing experience and nurse work place .

Findings show that, statistically, no significant association was found between nurses' attitudes

toward end of life care and those who had palliative care service experience, and nurses who had an interest in reading about end of life care. In contrast, a study reported that nurses who had palliative care service experience were less likely to show a positive attitude towards end-of-life care than nurses who had no palliative service experience, and nurses who read articles/brochures about palliative care were more likely to display a positive attitude than nurses who did not read articles/brochures about palliative care (Etafet al., 2020).

In addition to that, there was no association between nurses' attitudes with nurses who cared for patients at the end of life stage, which is incompatible with the result of the study done by Abate and colleagues (Marie Claire, 2017). Also, significant associations were found between nurses' attitudes and nurses who attended seminars and workshops about pediatric end of life care.

### CONCLUSIONS

Overall nurses have good attitude about end of life care, it's essential for nurses who were at fair or poor attitude about end of life care to be familiarized with the concepts of EoLC through trainings, workshops and formal or informal education in both academic and hospital settings.

### ETHICAL CONSIDERATIONS COMPLIANCE WITH ETHICAL GUIDELINES

This study was accepted by the Scientific Committee at the College of Nursing, accordingly approved by ethical committee at College of Medicine/University of Sulaimani. An official letter has been submitted from the College of the Nursing/University of Sulaimani to the General Directorate of Health (DOH) in Sulaimani City to get agreement for data collection for the current study. Consequently, an agreement letter has been submitted from (DOH) to Hiwa Cancer Hospital.

### FUNDING

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### AUTHOR'S CONTRIBUTIONS

Study concept; Writing the original draft; Data collection; Data analysis and Reviewing the final edition by the author.

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