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# Healing Effect of Intercession Prayer in Stroke Patients

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Abstract: The present study was undertaken to assess the healing effect of intercessory prayer (IP) in stroke patients. Patients from stroke ICU were taken for the study by random selection. Patients were grouped into case and control. Intercessory prayer offered for the case group by the investigator for an hour in the evening from the day of admission to one week. Both the control and case group were analyzed by using data from the medical records. The present study results showed healing effect on patients who received intercessory prayer. The stroke patients who received prayer showed less complications while staying in the hospital and number of days were also less. Nonverbal pain score have low score for the case group(prayer received group)comparing with the control group. Mortality rate was comparatively less for the case group. Our study provides preliminary evidence for positive healing effect of intercessory prayer (IP) for stroke patients. Further detailed studies with more parameters and with higher sample size is recommended for more evidence and suggests that prayer may be an effective adjunct to standard medical care.

**Keywords:** Intercessory prayer (IP), stroke, patients, healing, intensive care unit (ICU)

#### 1. Introduction

Intercession prayer is one of the oldest and most common interventions used with the intention of alleviating illness and promoting good health, it is practiced by group setting time aside to petition God on behalf of another who is in some kind of need.1 Whenever Moses prayed by holding up his hand, Israel prevailed, and whenever he lowered his hand, Amalekprevailed2. Religious traditions across the world display benefits in healing through prayer. Prayer is a special form of meditation and may therefore convey all the that have been associated benefits meditation3.Intercessory prayer for serious illness like cardiac failure, cancer, stroke etc are beneficial to patients especially for stroke patients, because stroke is the fifth leading cause for death at this present era. stroke is defined by the world Health Organization as a clinical signs of focal (or global in case of coma) disturbance of cerebral function lasting more than 24 hours or leading to death with no apparent cause other than a vascular origin4. Intercessory prayer offered to this group of the patients will be associated with shorter hospital stay and with less complications5 .However related studies are very few in India.

A study on the effect of prayer on 219 infertile women between age of 26-46 years in Seoul, South Korea who were treated with in vitro fertilization embryo. They are grouped into distant prayer and control groups. Prayer was done in USA, Canada and Australia by prayer groups. It was not known to patients or their providers. So this study was randomized, triple blind, and controlled and prospective in design. And there was positive outcome associated with prayer. He found that women who received prayer showed nearly twice as high a pregnancy rate than who did not received prayer (50 VS.26%; P<0.005) And also women who received prayer had higher implantation rate (16.3vs.8%;P<0.001)6.

A previous study (2006) regarding the effect of intercessory prayer on wound healing in a nonhuman primate species and 22 bush babies were taken as samples .These samples were grouped into two as case and control groups. There was improved outcome with case group7.A randomized, double blind, prospective study was done at the Mid America Heart Institute(MAHI),Kansas city, Mo ,over a 12-months period to determine whether remote intercessory prayer for hospitalized cardiac patients will reduce overall adverse events and length of stay. Remote

Intercessory prayer was associated with lower CCU course scores. This result suggests that prayer may be an effective adjunct to standard medical care.<sup>8</sup>

A double blind randomized study was done in a university hospital (Rabin Medical center, Bilison Campus)in Israel during 1900-6 to determine whether remote, retroactive intercessory prayer has an effect on outcomes. Mortality was 28.1% in the intervention group and 30.2% in the control group. Length of stay in the hospital and duration of fever were significantly shorter in the intervention group than in the control group9. There is increasing interest on prayer in healthcare. Prayer is an activity related to spirituality and religion. Positive results have been observed regarding spirituality in health 11. Hence the present study was undertaken to provide further scientific evidence regarding healing effects of intercessory prayer in stroke patients.

#### 2. Materials and Methods

The present study was conducted at Stroke ICU, Little Flower Hospital and Research Center, Angamaly, Kerala in between March 2018-September 2018 . The study was approved by institutional ethical committee of Little Flower Hospital and Research Center, Angamaly, No EC/ 22/2017. Permission also obtained from the medical officer of the Neurology Department to collect data from the patients' records.

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#### **Participants**

A total of 60 stroke patients were included in the study .By random selection patients were grouped into case and control.

#### **Inclusion criteria**

All Stroke patients were included (who were admitted in the stroke ICU in Little Flower Hospital)

Patients of any or non -religious faith were included in the study

#### **Exclusion criteria**

Out patients were excluded.

#### Methods

Intercessory prayer offered for the experiment group by the investigator for an hour in the evening from the day of admission to one week (7 days). Both the control and case group were analyzed by using following parameters from the medical records.

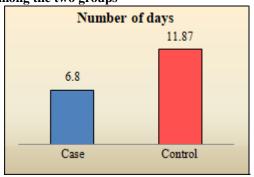
- 1. Mortality in hospital
- 2. Length of stay in hospital.
- 3. Assessment of complication level.
- 4. Nonverbal pain assessment scale (NVPAS).

#### Statistical analysis

Data was analyzed by SPSS 22.0. Statistical test applied are chi-square and student t test. P value <0.05 was considered as significant.

#### 3. Results

1) Comparison of number of days of hospitalization among the two groups



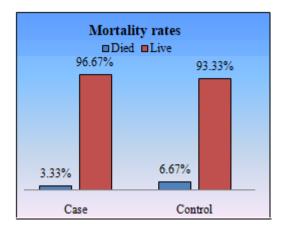
### t-test to compare the number of days of hospitalization among the two groups

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Group	Mean	S.D.	N	Mean difference	t	df	Significance (p-value)		
Case	6.8	3.46	60	5.07	2.025	58	p < 0.05		
Control	111.87	13.26		0.07		-	P ( 0.00		

The Mean column in the t test table displays the average days of hospitalization (6.8&11.87). The Standard Deviation column displays the standard deviation of number of days among the case and control groups .Mean difference 5.07 is the difference between mean number of days in two groups. Since the significance (p-value) is less than 0.05, we can conclude that there is significant difference in number of days of hospitalization between cases and controls.

#### 2) Comparison of mortality rates among the two groups

Mortality	(	Total		
Wiortanty	Case	Control	Total	
Died	1	2	3	
Live	29	28	57	
Total	30	30	60	

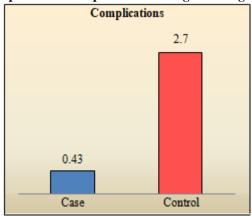


Chi-square to compare the proportion of mortality among the two groups

Group	Proportion	n	proportion difference	χ2	df	Significance (p-value)
Case	3.33 %	60	3.34 %	0.351	1	p = 0.554
Control	6.67 %					p = 0.334

The Proportion column in the table displays the proportion of deaths among cases and controls (3.33 %&6.67 %). Since the significance (p-value) is greater than 0.05, we can conclude that there is no significant difference in the mortality rates between cases and controls.

#### 3) Comparison of complications among the two groups



t-test to compare complications among the two groups

Group	Mean	S.D.	N	Mean difference	t	df	Significance (p-value)
Case	0.43	1.22	60	2.27 4	4.76	58	p < 0.05
Control	2.7	2.31	0	2.27	7.70	5	p < 0.05

The Mean column in the t test table displays the average number of complications (0.43&2.7). The Standard Deviation column displays the standard deviation of complications among the case and control groups. Mean difference 2.27 is the difference between mean complications in two groups. Since the significance (p-

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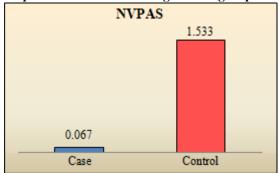
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value) is less than 0.05, we can conclude that there is significant difference in the number of complications between cases and controls.

#### 4) Comparison of NVPAS among the two groups



t-test to compare the NVPAS among the two groups

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	Group	Mean	S.D.	n	Mean difference	t	df	Significance (p-value)		
	Case	0.067	0.254	60	1.466	4.1	50	p < 0.05		
	Control	1.533	1.94	00	1.400	4.1	20	p < 0.03		

The Mean column in the t test table displays the average NVPAS (0.067 & 1.533). The Standard Deviation column displays the standard deviation of NVPAS among the case and control groups. Mean difference 1.466 is the difference between mean NVPAS in two groups. Since the significance (p-value) is less than 0.05, we can conclude that there is significant difference between NVPAS between cases and controls.

#### 4. Discussion

Prayer may result in health and healing through one or more of several mechanisms<sup>12</sup>.Different mode of meditation have been resulted in psychological and biological changes that are associated with improved health 13. Significant results have been observed in many diseases like anxiety, depression/schizophrenia, -compulsive disorder, tardive dyskinesia, ischemic heart disease, cardiac failure, Parkinson's disease and cancer<sup>14-20</sup>. Our study results are in accordance with previous findings as we have observed healing effect on patients who received intercessory prayer. The stroke patients who received prayer showed significantly less complications while staying in the hospital (0.43vs2.7;p<0.05)and number of days (6.8vs11.87;p<0.05), non verbal pain score( 0.067vs1.533;p<0.05))were also significantly less for the case group(prayer received group) comparing with the control group. Mortality rate (3.33% vs6.67%; p=0.05) is comparatively less for the experiment group. Spiritual meditation helped to maintain in positive mood, spiritual health and tolerance to pain.<sup>21</sup> Across the planet, people pray for health and for relief in times of disease<sup>22</sup>. Even when physicians or nurses feel they are unprepared to pray with patients, the presence of religious leaders or chaplains should be requested as they are member of the multidisciplinary healthcare group. The results of this study show that the use of intercessory prayer, in clinical practice may promote different positive effects.<sup>23</sup>

#### 5. Conclusion

Different types of therapies and interventions have been put up to help patients to cope when dealing with health problems. Prayer is an activity that is commonly used and investigated as a therapeutic and adequate intervention in healthcare<sup>23.</sup> Our study provides positive effect of intercessory prayer on stroke patients: Further detailed studies with more parameters and with higher sample size are recommended for further evidence and that prayer may be an effective adjunct to standard medical care.

#### 6. Conflict of Interest

Conflict of interest declared none

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