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Research Article

**A FAMILY INTERVENTION TO REDUCE DELIRIUM IN
HOSPITALIZED ICU PATIENTS: FEASIBILITY
RANDOMIZED CONTROLLED TRIAL****¹Dr Syeda Kanwal Zameer,²Dr Fahad Naeem,³Dr Komal Aslam.**¹MBBS, Nawaz Sharif Medical College, Gujrat.²MBBS, Ameer ud Din Medical College, Lahore.³MBBS, Avicenna Medical College, Lahore.**Article Received:** May 2020**Accepted:** June 2020**Published:** July 2020**Abstract:**

Although, in ordinary health-care settings, delirium is specifically prevailing the critical room varying from 50% to 90% and could contribute to a series of unfavorable outcomes that are involving: for long-term admission in the hospitals and critical medical rooms can lead to reduce the value of standards of living, functional independence, psychological morbidity and intellectual disabilities.

The sample of participants were including: the patients, the family members of patients and nurses of Intensive Care Unit. That was randomized controlled trial. The patients who were eligible for this study were equal or more than 20 years and admitted in ICU for more than 5 days, delirium can see in them; and had visits of relatives.

The nursing staff was caring of all aspects of intervention and didn't record marked hurdles in that Intensive Care Unit. The family members of patient were important for care, and their presence manages important positive results for the patient in ICU. Physicians should keep in mind that the family members are a focus of care as well; next to the patient and the involvement of family members have no unfavorable effects on partnership with patient.

Corresponding author:**Dr. Syeda Kanwal Zameer,**

MBBS, Nawaz Sharif Medical College, Gujrat.

QR code



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INTRODUCTION:

Although, in ordinary health-care settings, delirium is specifically prevailing the critical room varying from 50% to 90% and could contribute to a series of unfavorable outcomes that are involving: for long-term admission in the hospitals and critical medical rooms can lead to reduce the value of standards of living, functional independence, psychological morbidity and intellectual disabilities. Several risk factors can lead to the evolution of delirium in the intense sick patient, involving predisposing features and multiple diseases (such as declining age, intellectual disabilities) and causing elements associated to the sickness and rehabilitation in hospital. Suscribing some changeable risk factors of the client, like accommodation and proper afferent stimulation, can help in the elimination and reduction of occurrence and time period of delirium in intensive care unit. To date, several multiple components of treatments have been formed to gain in the older patients who are admitted in wards of hospitals. Although most of the patients delivered to the medical nurses' personnel, small number have illustrated as well the possible effectiveness of relatives providing the same treatment intervention to the family members. Whilst the occurrence of delirium in intensive care unit, the relatives can possibly play an important character to minimizing and eliminating the occurrence of multiple symptoms, and can also assist in the formal collaboration between the nursing staff and the members of family, that are not commonly incorporated in practice. 10 participants observed by the nurses in ICU as a crucial link, and a proxy "voice" relatives' confidential knowledge of the client can provide daily to background that need to accommodate the client to reality, the give the consolation and intimate comfort. There are also advantages for family members, this study showed that the family perceive more respect, support and partnership from the nursing staff, all are connected physically and emotionally to the family members. This study wanted to evaluate the feasibility and acceptability of family provided the intervention to decrease the delirium in the patient who is in intensive care unit. It desired to regulate: the feasibility of selecting participants, the reservation of relatives by the study, the feasibility of delivering the interventional treatment as evaluated through the slips of data collection and acceptability of relatives to provide intervention in intensive care unit given by the nursing staff.

Data collection:

In this study the demographic data of participants was conducted. The tasks of interventional group and non-interventional group were noted by the particular plan, data collection slip at the bedside of patient in ICU. Family members were commanded

to fulfill the information in slip on every visit they have to place a tick in the box that was the elements of the interventional group. To non-interventional group were instructed to note down about their activities that they have done in whole day with their family members. The delirium in the patients who were in ICU were evaluated by the Confusion Assessment Method for Intensive Care Unit

METHODS:

The sample of participants were including: the patients, the family members of patients and nurses of Intensive Care Unit. That was randomized controlled trial. The patients who were eligible for this study were equal or more than 20 years and admitted in ICU for more than 5 days, delirium can see in them; and had visits of relatives. The eligibility criteria for family members based on visits of relatives and have a regular connection with patient. One family member selected for one patient. The participants in Intensive Care Unit cohort (2%) who were unable to write and speak in English were excluded because there was no translator available in this study.

Results:**Sample Characteristics:**

In overall study of cohort there were 100 patients were recruited (40 in the pre-randomization group; 30 in interventional group and 30 in non-interventional group) and 60 family members. Features of participants (such as age, gender and length of stay in Intensive Care Unit), the length of Intensive Care Unit should be more than 5 days. There were no marked difference between the description of patients and groups and no different between the description of family members and the groups. 15 nurses were recruited from ICU. 20 female nurses were (75%), the nurses who were postgraduate were (69%) and who have experience of less than 6 years nurses were (50%) and (60%) recruited as ICU specific. The study recruitment rate was low (30%) with 100 participants selected from the 330 patients. The participants without consent (15%) were excluded, with non-success to asses by the staff that was (75%).

Feasibility and acceptability of intervention:

The frequency of delirium in the ICU was (55%) in pre- randomization, (63%) intervention and (60%) non-intervention. Groups were proportional and statistically different ($p=0.89$, $p=0.99$). Those who were completed their slip at least 2 days were analyzed they had delirium were also non-statistically significant and comparable ($p=0.82$), the rate were lower in interventional group (55%) than (59%) in non-interventional group. The time period of delirium in ICU of both were equal, the median of delirium ($p=0.70$) experienced by both

groups. Analyzing the active participants ($p=0.99$). When involving all randomized selected participants and applying means and standard deviation of interventional treatments ($M=1.40$), ($SD=1.61$) and control groups ($M=1.08$; $SD=1.15$) for the delirium length of days in ICU, the effect size was 0.29 for Cohen's d . With the power of 0.90 and probability level of 0.05, for future study the sample size should be $n=600$ participants 300 interventional group and 300 non-interventional group respectively.

That was the first research which is having a multiple component in which relatives delivered the intervention desired to minimize the delirium whilst the Intensive Care Unit patients. Especially, the interventional treatment was established on subsisting research in which alike intervention with family members minimize the delirium in geriatrics in the general wards. It was deliberated to provide initial information to notify the appropriateness of planning of larger randomized controlled trial. In terms of feasibility of selection, the research was impeded by comparatively less participant selection rate (30%), with the exclusion inadequate research staff to select the participants. It may be due to the restricted study time of nurses (from 8:00am to 4:30pm), 5 days in a week and also doing duty hours that lost the chances to meet the patients who are eligible for this study and their relatives, because most of people visited their patients in evening time, after their work and on the end of the week.

Next, participants have to be screened for delirium, that mean the selection could not occur for several days, as proved by the recruitment taking a median of 6 days of admission in hospital. Researches evaluating delirium in the patients of Intensive Care Unit with equal acuity will realize the enrollment suspension as well. The evaluation of delirium needs the participants to be reactive to Confusion Assessment Method-Intensive Care Unit. Minimizing the probability of cross contamination is essential. The members of family in interventional group may copy other groups doing their tasks, like carrying pictures from their homes and individualized the bedside. The prevention for infection of groups is a major task to do in ICU research as family members and patients are usually remaining close to each other. Observing what will be happened in future studies that would be important. A cluster randomized controlled trial is a way to control potential infection. Relating the acceptability of intervention, the family member were retain that was the good part of this study, reliable delivering of intervention seem substandard according to the data collection slips. The family member didn't report all the components they wanted to make

some changes in the intervention, but relatively fulfilling the data slip was inconvenient. There may be situation that the family members may have done the tasks but forget or fail to report it. That means the requirement for evaluating the modifying methods for the data collection for precision. The change can be done through the direct record by the nurses and tasks should performed by the family members, this could also lead the good relationship and interplay of nurses and family members.

Such nursing staff and family partnership on view of intervention may increase the impact. Furthermore, the members of family with the relatives in ICU can be invited to participate the focused group for acceptability of user. In past researches the authors recommended that the victory of multiple components interventions to minimize delirium so associated to the levels of protocol constancy and reporting on the data slips that was substandard in our study. Constancy can be refining if the direct nurses perform the intervention in the absence of family members.

That was randomized controlled trial was able for selection, randomization and retention of family members. For higher selection rates, the research nurses timing should be extend in evening and along the weekends and more planning needed to enhance protocol constancy and data collection by appointing the reassurance of nurse's direct care. The nursing staff was caring of all aspects of intervention and didn't record marked hurdles in that Intensive Care Unit. The family members of patient were important for care, and their presence manages important positive results for the patient in ICU. Physicians should keep in mind that the family members are a focus of care as well; next to the patient and the involvement of family members have no unfavorable effects on partnership with patient.

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