



**THE EFFECT OF SOCIALIZATION EXTERNALIZATION COMBINATION
INTERNALIZATION METHODS IN IMPROVING THE IMPLEMENTATION OF
EARLY MOBILIZATION IN INPATIENT WARDS**

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ABSTRACT

Early mobilization is a therapeutic approach involving physical activity or patient mobilization that begins early after medical procedures, such as surgery, especially in the context of intensive care unit (ICU) care. The purpose of this study was to prevent complications associated with immobility, such as muscle weakness, decreased physical function, and cardiovascular problems, and to accelerate patient recovery. The research method used a literature review with a search for relevant articles using semantic science. This study is in accordance with the keywords that have been found and refers to the criteria for dysarthria and speech therapy, the overall search results for articles from 3 databases contained 350 articles. After filtering the full text obtained 10 journals from scientific articles published in the last 5 years (2019-2024), which showed that there was an influence of the externalization socialization method combined with internalization in improving the implementation of early mobilization in the inpatient ward. Research with an orthogonal design showed no influence of the externalization socialization method combined with internalization in improving the implementation of early mobilization.

Keywords: early mobilization; inpatient ward; SECI

How to cite (in APA style)

Karnadi, K., Suyanto, S., Melastuti, E., & Susanto, H. (2025). The Effect of Socialization Externalization Combination Internalization Methods in Improving the Implementation of Early Mobilization in Inpatient Wards. *Indonesian Journal of Global Health Research*, 7(2), 805-812. <https://doi.org/10.37287/ijghr.v7i2.5611>.

INTRODUCTION

Management post optimal operation is key success in increase quality life patient post surgery. Various effort has done For speed up recovery and reduce complications , one of which is is Enhanced Recovery After Surgery (ERAS) approach . Lack of knowledge and understanding power health about Early mobilization protocol is one of the factor inhibitor main in implementation practice based on evidence in the field . Research This propose SECI approach as a strategy for overcome constraint the with method facilitating knowledge transfer , improving skills clinical , and building culture continuous learning among Health workers . This is result in potential significant benefits of early mobilization No maximized optimally in practice clinical everyday (Jurt et al., 2020).

Problem nursing care that occurs in post- operative patients covering weakening (worsening) circumstances), limitations function body and disability . Weakening covering painful acute in part location surgery , fear and LGS (Joint Range of Motion) limitations . function body covering inability standing , walking , and ambulation and disability covering disturbed activity Because limitations motion consequence pain and procedures medical (Kristiantari , 2019). Early mobilization has been proven as effective intervention in speed up recovery post operations . Research (Ljungqvist et al., 2017) reported subtraction duration take care stay up to 30% in the group patients undergoing early mobilization. The underlying mechanisms benefit This among others, improvements circulation blood, repair function lungs, prevention deep vein thrombosis , and stimulation gastrointestinal function. On the other hand, the

method conventional marked with restriction activities and giving delayed food often cause complications such as paralytic ileus (Academic Journal, 2023), which can extend time take care stay and improve risk morbidity. Dependence on opioids for control pain can also be to worsen condition patient with trigger effect side like nausea, vomiting, and constipation, which in turn hinder mobilization and slows down the healing process wounds (Frontiers in Surgery, 2023). Evaluation to patient post operation in a way routine disclose existence frequent complaints reported, such as painful acute, abdominal distension (stomach) bloating and anxiety related mobilization. Complaints This indicates existence need will intervention comprehensive nursing care For increase convenience and speed recovery patient.

Research results of Moshref et al. (2022) show improvement significant in quality maintenance patient up to 25% after six month training. Findings This in line with studies local conducted by Adityo et al. (2021) in a House sick in Indonesia, where training use SECI method is successful increase knowledge power medical regarding early mobilization and speeding up time recovery patient until One day. Early mobilization that started with on-site training sleep, like movement legs and trunk, are integral components in protocol rehabilitation post Operation. Approach progressive this, which involves improvement gradually in activity physical, purposeful For restore strength muscles, increase flexibility joints, and prevent common complications happen post operation. With support power competent health, patients can in a way gradually reach objective rehabilitation, namely return to level function before operations and improve quality life in a way overall (Kozier, Erb, Berman, and Snyder, 2010).

Lack of understanding to protocol mobilization early and influence factor behavior individual become constraint significant in program implementation. The SECI model, which facilitates conversion tacit knowledge becomes explicit through interaction social, offering potential solution For increase success of the mobilization program early in the environment House pain (Nonaka and Takeuchi Nakamura, T., et al., 2019). Research show that SECI method does not only increase collaboration between team medical, as found by Nakamura et al. (2019), but also in significant repair results maintenance patient. Rooted in the theory management knowledge, SECI has proven effective in facilitating knowledge transfer between profession and encourage learning sustainable in various sectors, including health (Garcia et al., 2023). Further studies carry on disclose that SECI implementation can increase involvement power medical and strengthening understanding they to practice complex care. Another advantage of method This including improvement innovation, learning sustainable, management effective knowledge, and better collaboration strong.

In the ICU, the success of the mobilization program early and rehabilitation are closely related with supportive culture intervention This. *Mobility champions* contribute significant to development culture the with lead effort education and training staff, coordinate team, and promote mobilization patient. Function This important For increase trust self and ability staff in carry out mobilization with safe and effective (Fuest et al., 2023). Wong et al., (2022) Advantages This SECI method covering happen improvement innovation, learning sustainable, management effective and improving knowledge collaboration. In addition to the advantages there are also shortcomings SECI methods include: lack in implementation, dependence culture organization, requires huge resources as well as potential information excess (Farnese et al., 2019). research This aiming For explore more carry on How SECI method can used For increase knowledge power health specifically nurse as well as optimize implementation mobilization early in the ward take care stay. Research This expected can give contribution significant.

METHOD

Methods used is a literature review with identification in the search strategy . Literature review is used in search articles on research SECI method against early mobilization knowledge , in using keywords. Keywords used in study This is the “early mobilization” of literature data in study This originate from article published scientific papers in 5 years last (2019-2024) and obtained through machine semantic scholar searcher .

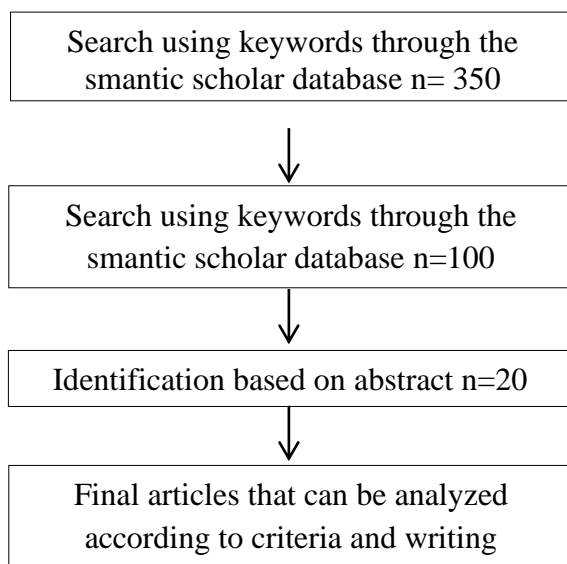


Figure 1. Flow chart

Selection process article For This literature review started with identification beginning as many as 350 articles from the semantic cholar database . After being done filtering to publication and relevance based on article metadata , 100 eligible articles were obtained for evaluated more Next . Evaluation stage deep Then done against 10 articles selected based on criteria inclusion that has been set , so that obtained sample end For review library

RESULT

Table 1.
Article Search

Journal	Title / author / year	Place research (country)	Method (sample)	Research purposes	Results
1	Effectiveness of Early Mobilization and Administration of Cork Fish Extract on Wound Healing of Section Cesarean Surgery at Noemuti Health Center (Sepeh et al., 2024)	Indonesia	design quasi-experimental with approach comparison static group (sample as many as 60 respondents)	Study This aiming For identify effectiveness mobilization early and giving snakehead fish extract to healing wound post Sectio Caesarea operation at Noemuti Health Center . Focus main is For see How second intervention the can speed up the healing process and reduce risk infection wound	Analysis results show mark significance $p < 0.05$, which indicates that There is difference significant in healing wound between group intervention and group control
2	Impact of Early Mobilization Facilitation on Postoperative Pulmonary Outcomes After Colorectal Surgery (Balvardi et al., 2021)	Canada	randomized controlled trial (Patients planned adults (> 18 years) undergo resection	For estimate to what extent is the facilitation mobilization early directed staff influence recovery function lungs and complications lungs post operation in 30 days after operation colorectal	Study This show that facilitation mobilization early by staff No increase function lungs post-operative or reduce PPC in context track enhanced recovery For operation colorectal

Journal	Title / author / year	Place research (country)	Method (sample)	Research purposes	Results
			colorectal at home university hospital in Montreal.		
3	Enhanced Recovery After Surgery Protocol: Evaluation of the Effectiveness of Early Mobilization in Postoperative Laparotomy Patients: A Case Study(Jasmin & Zuraida , 2023)	Indonesia	Case study (there were 8 respondents)	Study This aiming For evaluate effectiveness mobilization early on length of stay (LoS) and recovery intestinal motility in patients post laparotomy .	Research result This show that intervention mobilization early is very useful in reduce LoS and speed up recovery intestinal motility in patients post laparotomy .
4	Effect of Chest Physiotherapy along with Early Mobility after Abdominal Surgery(Kabir et al., 2021)	Bangladesh	Quasi-experimental (60 patients)	Research purposes This is For evaluate effect concurrent chest physiotherapy with mobilization early after abdominal surgery . Research This investigate influence combination chest physiotherapy and mobilization early as well as chest physiotherapy only to function breathing , length of stay at home pain , intensity pain , level saturation oxygen , and independence status functional (FIM).	Research result This show that combination chest physiotherapy with mobilization early more effective in reduce the length of stay at home sick and improve function breathing as well as independence functional compared to only with chest physiotherapy only
5	Early mobilization of critically ill patients in the intensive care unit: A systematic review and meta- analysis (L. Zhang et al., 2019)	Australia	controlled trial (A trial involving patient adults (≥ 18 years) who receive mobilization early . 23 RCTs involving 2,308 patients)	Study This aiming For evaluate effect mobilization early in patients critical in the care unit intensive care unit (ICU) and for identify existing evidence about benefit from intervention This to recovery patient	Research result show that mobilization early own benefit significant for patient critical , although There is a number of improvement moderate in level death and adverse events . However , the differences the No significant in a way statistics
6	Optimization of Early Mobilization Program for Patients With Acute Ischemic Stroke: An Orthogonal Design(M. Zhang et al., 2021)	China	orthogonal design (Age 18–80 years , NIHSS $1 \leq$ NIHSS < 16 , and Barthel index ≤ 85)	Study This aiming For investigate combination best from various factor affecting mobilization early in patients with ischemic stroke acute , use develop mobilization programs optimal start	Research result This Mobilization beginning with exercise physique intensity tall in within 24–48 hours after stroke onset provides benefit for patients , including subtraction symptom deficit neurological , improvement capacity maintenance self , and quality a better life Good
7	A comparison of the effectiveness of therapies for frozen shoulder (FS): mobilization with continuous	India	studies prospective comparative (60 patients)	Study This aiming For compare effectiveness mobilization with Continuous Passive Motion (CPM) using Continuous Intermittent	Research result This indicates that both CISB and IASI are effective in increase satisfaction patient with deep frozen shoulder term long .

Journal	Title / author / year	Place research (country)	Method (sample)	Research purposes	Results
	interscalene block (CISB) and mobilization with intra-articular steroid injection (IASI) (Zacharia & Roy, 2023)			Stretch (CISB) and Intermittent Active Stretch (IASI) in increase range motion shoulder joint in frozen shoulder patients .	However , the analysis statistics show that group undergoing mobilization with CISB reporting level satisfaction that is significant more tall after One follow-up year
8	Effectiveness of Maitland Mobilization versus Pain Release Phenomena for Pain, Range of Motion and Disability in Early Knee Osteoarthritis(Taj et al., 2023)	Pakistan	randomized controlled trial (participants aged between 35-60 years , including second type sex , which is diagnosed with osteoarthritis knee stages 1 and 2, and experience painful unilateral knee and drop range motion knee)	The purpose of study This is For compare effectiveness Maitland mobilization technique and Pain Release Phenomena technique in reduce pain , improve range of motion , and reduce disability in patients with osteoarthritis knee stage beginning	Research result This show that interventions provided in a way effective reduce level pain (p = 0.03) and increased range motion joints knees , good flexion (p = 0.001) and extension (p = 0.002). In addition , higher WOMAC scores low in a way significant (p = 0.001) indicates decline disability in participants after follow the intervention program ..
9	Does Early Mobilization Following Resection of Spinal Intradural Pathology Increase the Risk of Cerebrospinal Fluid Leaks?— A Dual-Center Comparative Effectiveness Research(Schwake et al., 2024)	Germany	comparative effectiveness research (Involving 40 non-intubated patients) aged over 18 years who are treated in a care unit intensive during more from 24 hours)	Study This aiming For investigate whether mobilization early after resection intradural spinal tumor increases risk leakage fluid cerebrospinal fluid (CSFL). Research This focus on comparison between two protocol maintenance post different operations For determine influence period rest in place Sleep to CSFL incident	The results show that in the bed rest center , two patient experienced CSFL (1.98%), while in the center mobilization early , four patient experienced CSFL (3.96%). None difference significant between second group (p = 0.683), which indicates that mobilization early No increase CSFL risk . In addition , the analysis show that Duraplasty expansion is factor risk independent for CSFL (OR 60.33, p < 0.001)
10	Effect of Early Mobilization on Respiratory and Limb Muscle Strength and Functionality of Nonintubated Patients in Critical Care: A Feasibility Trial (Richtmoc et al., 2020)	Brazil	feasibility study (involving 40 non-intubated patients) over 18 years old with a longer ICU stay from 24 hours)	Study This aiming For evaluate effectiveness mobilization beginning to strength muscle breathing and functionality non-intubated patients treated in the intensive care unit intensive care unit (ICU)	Research result This show that protocol mobilization initial applied succeed increase strength muscle breathing in a way significant , with significant increase in MIP (43.93 ± 21.95 vs. 54.12 ± 21.68 cmH2O; P < 0.001) and MEP (50.32 ± 28.65 vs. 60.30 ± 21.23; P = 0.002) values. In addition , the intervention this also has an impact positive on various aspect functionality patient . Although there is roof and floor effects on some scale measurement , in

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					overall protocol This proven effective in maintain and improve functional status non-intubated patients in the ICU

DISCUSSION

Review this *literature review* For evaluate influence method of socialization externalization combination internalization in improvement implementation of early mobilization in the ward take care hospitalization . Results of 10 studies from 9 countries with Miscellaneous design research , including 1 study comparative comparative , 1 study with studies case , 1 study with feasibility study, 2 studies with *quasi experiment* and 3 studies with RCT 1 comparative effectiveness research. Research with orthogonal design shows No there is influence method of socialization externalization combination internalization in improvement implementation of early mobilization. Speech et al (2024) in study This get Results of 60 respondents . Analysis results show mark significance $p < 0.05$, which indicates that There is difference significant in healing wound between group intervention and control groups . Balvardi et al (2021) in study This take Patient planned adults (> 18 years) undergo resection colorectal at home university hospital in Montreal. Criteria exclusion including disease metastatic , inability For mobilization in a way full , and plans take care stay in ICU after Operation . Research This show that facilitation mobilization early by staff No increase function lungs post-operative or reduce PPC in context track enhanced recovery For operation colorectal . Jasmin (2023) in study This there were 8 respondents divided into 2 groups that is group intervention (4 participants) and group control (4 participants) . Participants chosen use technique taking sample random . Research results This show that intervention mobilization early is very useful in reduce LoS and speed up recovery intestinal motility in patients post laparotomy . Research results This show that interventions provided in a way effective reduce level pain ($p = 0.03$) and increased range motion joints knees , good flexion ($p = 0.001$) and extension ($p = 0.002$). In addition , higher WOMAC scores low in a way significant ($p = 0.001$) indicates decline disability in participants after follow the intervention program .

Kabir et al (2021) in study This get results respondents 60 patients were taken by convenience sampling with patient aged 15-70 years who undergo abdominal surgery and anesthesia general . Research results This show that combination chest physiotherapy with mobilization early more effective in reduce the length of stay at home sick and improve function breathing . Zhang et al . , (2019) in study This , trial involving patient adults (≥ 18 years) who receive mobilization early . 23 RCTs involving 2,308 patients . The results of the study show that mobilization early own benefit significant for patient critical , although There is a number of improvement moderate in level death and adverse events . However , the differences the No significant statistically . Zhang et al (2021) in study This Patients included aged 18-80 years , diagnosed with ischemic stroke acute , and fulfilling criteria inclusion certain . Research results This Mobilization beginning with exercise physique intensity tall in within 24–48 hours after stroke onset provides benefit for patients , including subtraction symptom deficit neurological , improvement capacity maintenance self , and quality a better life both Zacharia et al (2023) in Study This is studies comparative prospectively conducted For evaluate and compare effectiveness two therapy for frozen shoulder (FS): mobilization with continuous interscalene block (CISB) and mobilization with intra- articular steroid injection (IASI). Research results This indicates that both CISB and IASI are effective in increase satisfaction patient with deep frozen shoulder term long . However , the analysis

statistics show that group undergoing mobilization with CISB reporting level satisfaction that is significant more tall after One follow-up year .

Taj et al (2023) in study This get results respondents aged between 35-60 years , including second type sex , which is diagnosed with osteoarthritis knee stages 1 and 2, and experience painful unilateral knee and drop range motion knee . Research results This show that in the bed rest center , two patient experienced CSFL (1.98%), while in the center mobilization early , four patient experienced CSFL (3.96%). None difference significant between second group ($p = 0.683$), which indicates that mobilization early No increase CSFL risk . In addition , the analysis show that Duraplasty expansion is factor risk independent for CSFL (OR 60.33, $p < 0.001$). Schwake et al {2024} in study This Involving 40 non- intubated patients aged over 18 years who are treated in a care unit intensive care unit (ICU) during more from 24 hours. Richtmoc et al ., (2020) in study This involving 40 non- intubated patients over 18 years old with a longer ICU stay from 24 hours. Research results This show that protocol mobilization initial applied succeed increase strength muscle breathing in a way significant , with significant increase in MIP (43.93 ± 21.95 vs. 54.12 ± 21.68 cmH₂O; $P < 0.001$) and MEP (50.32 ± 28.65 vs. 60.30 ± 21.23 ; $P = 0.002$) values. In addition , the intervention this also has an impact positive on various aspect functionality patient . Although there is roof and floor effects on some scale measurement , in overall protocol This proven effective in maintain and improve functional status non- intubated patients in the ICU

CONCLUSION

Based on review literature this , not yet There is strong evidence For support claim that SECI method in effective increase implementation of early mobilization . Although a number of study show positive results , but results the Still need confirmed through study more carry on with more design strong and more samples big .

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