

**EVALUATE SKIN-TO-SKIN CONTACT KNOWLEDGE AND PRACTICE
IN ETHNIC MINORITY MOTHERS
IN THE CENTRAL HIGHLANDS GENERAL HOSPITAL**

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ABSTRACT

Background: The skin-to-skin contact (SSC) is an integral part of the Early essential newborn care. This is a safe, simple and cost-effective intervention, bringing physiological, social and psychological benefits to both mother and baby in the immediate and long-term stage. Counseling for mothers about the benefits of SSC is necessary. The objective was to compare the SSC knowledge of intervened and controlled groups before and after counseling. Evaluate the practice of the intervened and controlled group after being consulted. **Materials and methods:** An intervention study with a 4-step controlled group designed. The intervention group (n = 45) received improved counseling (see pictures, videos, models), controlled groups (routine counseling). Each group was put into a separate room, they were evaluated at 2 points of time (when hospitalized and 24 hours after birth), their practice score evaluated. Each group's knowledge and practice were recorded and analyzed. **Results:** There were 90 ethnic minority mothers meeting the inclusion criteria. Before consulting, the controlled and intervention group's knowledge had an average (standard deviation) of 6.2 (± 2.5) and 6.0 (± 3.1), $p = 0.682$. 24 hours postpartum, respectively 7.3 (± 2.3) and 11.1 (± 2.9), $p < 0.001$. Immediately postpartum, controlled and intervened group's practice corresponds to 5.8 (± 1.2) and 8.2 (± 2.0), $p < 0.001$. **Conclusion:** The controlled group had an average (standard deviation) of knowledge 7.3 (± 2.3) higher than the pre-counseling time of 6.2 (± 2.5). The intervention group had an average (standard deviation) of knowledge 11.1 (± 2.9) much higher than before the counseling 6.0 (± 3.1). On average (standard deviation), the SSC practice of the intervention group was 8.2 (± 2.0) and the controlled group was 5.8 (± 1.2).

Keywords: Knowledge, practice, skin-to-skin contact, counseling program.

I. BACKGROUND:

The skin-to-skin contact (SSC) is an integral part of the early essential newborn care. This is a safe, simple and cost-effective intervention [1], [2], which brings physiological, social and psychological benefits to both mother and baby in the immediate and long-term. However, the rate of mothers who correctly understand and apply this method is still low [3], [4]. Therefore, counseling for mothers about the benefits of SSC is necessary [4]. According to Article 4, Circular 07/2011 / TT-BYT [5] of the Vietnam Ministry of Health, the hospital should have regulations and organize various forms of counseling and guidance on appropriate health education for patients.

However, until now, no research has evaluated the effectiveness of counseling for mothers on skin-to-skin contact at the Central Highlands Hospital. Because of the above situation, we conduct research: "Effectiveness of counseling to improve knowledge and practice skin-to-skin method on ethnic minority mothers". The results of this study provide evidence to evaluate the effectiveness of the improved counseling program compared to routine communication counseling methods at hospitals on ethnic minority people using the skin to skin contact method [6].

II. MATERIALS AND METHODS

1.1 Materials

Ethnic minority mothers who deliver in the Department of General Hospital in the Central Highlands during the study period met the criteria for sample selection.

1.2 Methods

Research design: An Intervention study with a controlled group.

Process of data collection: The study was carried out in 5 steps: Step 1: the researcher collected information to complete the hospitalization dossier, explained the benefits when participating in the study, invited to sign the participation in the research form. Instructions to draw into the intervention or controlled group; Step 2: Mothers are transferred to 2 different birth rooms. Survey knowledge of skin to skin contact in 2 groups. Room 2 (controlled group): Midwives at the department monitor, care and consult regularly at the department. Room 1 (intervention group): Verbal counseling, picture matching (12 minutes), watching the video (3 minutes), simulating by the model (5 minutes) and mothers repeating on the model (5 -10 minutes); Step 3: Observe the practice, mark the steps that the mother did correctly, after completing the practice checklist, instruct the mother to correct it; Step 4: 24 hours after birth when both physically and mentally stable, mothers in each group are transferred to their own postpartum room and re-examined their knowledge.

Methods of data analysis: Analysis and data processing using SPSS 20.0 software. Check and clean the data in each questionnaire before entering. Descriptive qualitative variables by frequency, percentage, 95% confidence interval (95% CI). Average quantitative variable and standard deviation for variables with a normal distribution.

III. RESULTS

Table 1. Median and quaternary age quintile by the controlled group and intervened Group.

Group	n	Age		Wilcoxon-rank test(p)
		Median	Quartile	
Controlled group	45	25	22 – 32	0,852
Intervention group	45	27	21 – 31	
Total	90	25,5	22 – 32	

Table 2. Median and quartile number of births by the controlled group and intervened group.

Group	n	Number of births		Wilcoxon-rank test (p)
		Median	Quartile	
Controlled group	45	1	0 – 2	0,479
Intervention group	45	1	0 – 2	
Total	90	1	0 – 2	

Table 3. Characteristics of Ethnicity, religion, living area of the study sample by the controlled group and intervened group.

Characteristics		Controlled group (n = 45)		Intervented group (n = 45)		Fisher's exact test p
		Frequency	Rate %	Frequency	Rate %	
Nation	Ede	23	51,1	25	55,6	0,629
	J'rai	2	4,4	2	4,4	
	M'Nong	5	11,1	8	17,8	
	Others	15	33,3	10	22,2	

Religion	Protestantism	18	40,0	18	40,0	0,878
	Christian	2	4,4	1	2,2	
	Buddhism	2	4,4	4	8,9	
	Others	23	51,2	22	48,9	
Living area	Urban	13	28,9	15	33,3	0,649
	Rural	32	71,1	30	66,7	

Table 4. Occupational characteristics, educational levels of the sample by the controlled and Intervention group.

Characteristics		Controlled group (n = 45)		Intervention group (n = 45)		Fisher's exact test p
		Frequency	Rate %	Frequency	Rate %	
Occupation	Farmer	28	62,2	30	66,7	0,002
	Woker	9	20,0	0	0,0	
	Health staff	3	6,7	2	4,4	
	Others	5	11,1	13	28,9	
Academic	Illiteracy	1	4,4	3	6,7	0,134
	Primary school	12	26,7	17	37,8	
	Secondary school	25	55,6	14	31,1	
	Above high school	6	13,3	11	24,4	
Ability to speak Vietnamese	Good	40	88,9	30	66,7	0,011
	Normal	5	11,1	15	33,3	
	difficult	0	0,0	0	0,0	

Table 5. Characteristics Vietnamese speaking ability of research sample by the controlled and Intervention group.

Characteristic		Controlled group (n = 45)		Intervention group (n = 45)		Fisher's exact test p
		Frequency	Rate %	Frequency	Rate %	
Ability to speak Vietnamese	Good	40	88,9	30	66,7	0,011
	Normal	5	11,1	15	33,3	
	Difficult	0	0,0	0	0,0	

Table 6. Compare SSC knowledge of controlled group before and after the counseling program (n=45).

Knowledge	Before consulting (Mean ± SD)	After consulting (Mean ± SD)	Difference Mean (KTC 95%)	p
Total score	6,2 ± 2,5	7,3 ± 2,3	1,1 (0,6 – 1,7)	< 0,001

KTC95%: Confidence 95%.

Table 7. Compare knowledge about skin-to-skin contact of the intervention group before and after counseling (n = 45).

Knowledge	Before consulting (Mean ±SD)	After consulting (Mean ± SD)	Difference Mean (KTC 95%)	p
Total score	6,0 ± 3,1	11,1 ± 2,9	5,1 (4,3 – 6,1)	< 0,001

KTC95%: Confidence 95%.

Table 8. The average score of SSC practice between the intervention group and the controlled group.

Practice	(Mean ± SD)		Difference Mean (KTC 95%)	p
	The controlled group (n=45)	The intervention group (n=45)		
Total score	5,8 ± 1,2	8,2 ± 2,0	2,4 (1,7 – 3,1)	<0,001

KTC95%: Confidence 95%.

IV. DISCUSSION

Characteristics of mothers of ethnic minorities who delivery to the Central Highlands General Hospital

In which the age of mothers with median was 25 (controlled group) and 27 (intervention group), the median age of the two groups was 25.5, this difference was not statistically significant with $p = 0.852$. There was a similarity in age characteristics of the study subjects in both intervened and controlled groups. This also shows the relevance because most mothers of childbearing age were usually under 30 [7], mothers aged 35 and younger make up 92.9%, this age was suitable for pregnancy and giving birth [8], compared with the study of Sanchez-Espino, the average age of mothers in the intervention group was 22.1 ± 5.3 , the controlled group was 23.1 ± 4.4 ; Unlike the study by Duong Thi Thuy Trang (2018), it was 33.7 ± 6.6 years old (the lowest age was 20 years old and the highest was 53 years old) [9].

The proportion of Ede ethnic people accounts for the majority of 51.1% (controlled group), 55.6% (intervention group), comparing with Tran Thi Diep's study, the ethnic groups of Bahnar and J'rai account for billions. The largest rate (33.5% and 13.7% respectively) [10] religion was mainly benign religion 40% (both groups), the main living area was concentrated in rural areas 71.1% (controlled group), 66.7% (intervention group). The majority of mothers of ethnic minorities who came to the General Hospital in the Central Highlands were farmers 62.2% (controlled group), 66.7% (intervention group). With occupations as workers accounted for 20% (controlled group), 0% (intervention group), health workers accounted for only 1 small proportion in both controlled groups and intervention groups respectively 6.7% and 4.4 %. The educational level of the study group was the majority in the primary and secondary schools with the corresponding rate of 26.7%, 55.6% (controlled group); 37.8%, 31.1% (intervention group), the proportion of illiterate people only accounts for a small number of 4.4% (controlled group) and 6.7% (intervention group); high school level 13.3% (controlled group) and 24.4% (intervention group).

The average score of knowledge of skin-to-skin contact method of the controlled group before and after consultation

The research results show that, when comparing the average of the SSC knowledge points of the controlled group before and after the counseling program, there was no significant change in knowledge. At the time of post-counseling only 7.3 ± 2.3 points higher than the pre-counseling time (6.2 ± 2.5 points), the difference between the two points was 1.1 points. Partial detailed analysis also showed that the difference in the knowledge section of the skin-to-skin method of the controlled group before and after the consultation did not

change much, ranging from 0.1 to 0.4 points.

At 24 hours postpartum, similar to the same period before the consultation of the controlled group, the knowledge of the benefits of the SSC in breastfeeding and increasing the emotional attachment of mother and daughter still reached. get the highest average score; The lowest knowledge average was the benefit of SSC for children. This may be due to the fact that this knowledge was still quite strange, highly specialized, the ability to access health services, the information from the media was limited. The explanation of the difference in knowledge before and after the controlled group may be the impact of routine counseling performed by faculty members, also due to the period from birth to 24 hours after birth. mothers in the controlled group had the knowledge reminiscent of the previous birth [11], reminiscent of the routine counseling knowledge of faculty members who had learned through the internet.

Average score SSC knowledge of the intervention group before and after counseling

At the time of post-counseling, ethnic minority mothers in the intervention group had a significantly higher average of knowledge after being consulted at 24 hours after birth (11.1 ± 2.9 points). Compared with the time before the consultation (6.0 ± 3.1 points) the difference of 5.1 points (95% CI: 4.3 - 6.1). Each part of SSC knowledge also shows that there were many significant changes in the average score in each section. The biggest difference of after counseling was reflected in the knowledge of the SSC benefits for newborn postpartum, with an average difference of 1.8 points. While the average score of knowledge in this section at the time before the consultation was lowest, only 0.6 points. Research results show that both groups (intervened and controlled group) have changed opinions at 24 hours postpartum, compared to the time before counseling. However, in the intervention group, there was a higher increase in knowledge points (5.1 points) in the controlled group (1.1 points).

Compare the average the practice of skin-to-skin contact between the intervened and controlled group

The research results showed that there was a significant difference in the average points of practicing SSC in ethnic minority mothers between 2 groups. The average number of practice points of the intervention group was 8.2 ± 2.0 , much higher than that of the controlled group of 5.8 ± 1.2 points, the average difference was 2.4 points (CI 95%: 1, 7 - 3.1 points), with statistical significance, $p < 0.05$. The average score for practice in both groups was 7.0 ± 2.1 points while the maximum total score was 12 points. Corresponding to the finding in the SSC guide of the Maternal and Child Health Program at Central Africa's Ekwenedni Maternity Hospital when developing the SSC communication programs to provide counseling personnel and groups in promoting behavioral changes around maternal and neonatal care [12] enhance social support and promote positive attitudes towards SSC. Unlike research at the Omolbanin Obstetrics Hospital (2014) [13] out of 92 mother-infant pairs (47 pairs applied to SSC and 45 couples in the regular care group). In the SSC group, the self-breastfeeding effect was 53.4 ± 8.57 in the controlled group, significantly higher in the routine care group 49.85 ± 5.5 .

In summary, the counseling program has a positive impact on the SSC practice of the intervention group, reflected in the higher average of this group compared to the controlled group. This positive difference is a matter of concern when giving advice to

mothers before birth on the correct and successful posture of first breastfeeding, based on encouraging a change in the behavior of a mother. Individuals require sharing knowledge, education and helping them understand the problem [13], [14]. However, the study was only conducted on the population of ethnic minority mothers with specific characteristics of the Central Highlands hospital, the short study period could not be applied to the above results for the other minorities.

V. CONCLUSION

Comparison before and after the controlled group counseling had a mean score of 24 hours after birth (7.3 ± 2.3) higher than the pre-counseling time (6.2 ± 2.5). The intervention group had an average score of knowledge at 24 hours after birth (11.1 ± 2.9), much higher than the time before counseling (6.0 ± 3.1).

At the time immediately postpartum, the average score of the SSC of the intervention group (8.2 ± 2.0) was much higher than that of the controlled group (5.8 ± 1.2).

Conflict of Interest: The authors declare that they have no conflict of interest.

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**THE IMPACT OF THE PEER-TRAINING WORKSHOP ON
NURSES' PERCEIVED CONFIDENCE IN PERFORMING
A VENOUS ULCER PROPOSED PROTOCOL**

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ABSTRACT

Introduction: Venous ulcer (VU) is the most common cause of skin integrity problems in the lower extremities. Knowledge and skills are equally important in managing VU. **Objectives:** To evaluate whether the peer-training workshop impacted the nurses' perceived confidence level in performing a venous ulcer (VU) proposed protocol. **Materials and Methods:** A convenience sample of 60- bedside registered nurses (RN) in an acute care hospital setting participated in a peer-training workshop which was provided by the outpatient wound care team. The acute care nurses were administered the Confidence-Scale (C-Scale) as a pretest and the demographic questionnaires prior to the peer-training workshop. The same group of nurses was administered the C-Scale as a posttest one week after the workshop. A paired-sample *t*- test was performed to evaluate the change in confidence level after the peer-training intervention. **Results:** There was a statistically significant improvement in confidence scores after the intervention for a total of five questions on the C-Scale. The theoretical framework for VU management peer-training workshop was based on the Constructivist theory that supported the impact of peer- to -peer training model. **Conclusions:** Globally, the result of this project can be presented to the international nursing institutions or hospitals for the model of peer-training crossing the countries. Peer-training workshop wound care outpatient-inpatient would be a model of training and VU management topic would be the target of educational intervention.

Keywords: Venous ulcer; Peer-training workshop; Proposed venous ulcer protocol; Self-confidence; Constructivists theory.