International Journal of Health Science (IJHS)

E-ISSN: 2827-9603
P-ISSN: 2827-959X

(Research/Review) Article

Effect of Fish Curse on Post Caesarean Wound Healing at Dr. Shodiq Jember Clinic

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Abstract: Background: Both medical and non-medical approaches can be used to post-cesarean care for wound healing. Changing the bandage on the surgical site once a day is an example of medical post-sc care. This study aims to determine the effects of giving catfish to patients who have had caesarean sections. Methods: This study had 27 people and employed a quasi-experimental non-equivalent research design. Ho is rejected and Ha is accepted when a statistical test using the Wilcoxon Test produces a p value of 0.000, where p value (0.000) is less than 0.05. It may be concluded that catfish extract at the Dr. Shodiq Jember Clinic works well to speed up the healing process of SC wounds. Conclusion: Giving kutuk fish extract is effective for healing post-CS wounds. This is because kutuk fish is easier for the body to digest, and has a higher albumin content than eggs. The high albumin protein content in kutuk fish makes this fish effective for the wound healing process. The phenomenon in society, since long ago, people believe that kutuk fish can accelerate the wound healing process, however, some people dislike or are hesitant to eat kutuk fish due to its fishy flavor and odor, therefore kutuk fish extract obtained through such a process, it will be easier for people to consume it, and the wound healing process will run.

Keywords: Kutuk fish; wound healing; cesarean section; albumin; postoperative care.

1. Introduction

Mothers who are not adequately nourished after childbirth may experience postpartum infections that can hinder cesarean section (SC) wound healing[1]. In essence, labor is a physiological process, although in some situations it can turn out to be pathological. This can result in a normal delivery becoming a caesarean section or SC.[2] On December 30, 2021, the Ministry of Home Affairs through the Directorate General of Population and Civil Registration released data for the second semester of 2021. According to Herdiawanto Heri et al. (2019), the number of births in Indonesia reached 691,259 [3].

According to RISKESDAS 2018, the maternal mortality rate (MMR) in Indonesia is 305 per 100,000 live births (Riskesdas, 2013). This figure is still far from feasible, although statistics show a decrease. In Southeast Asia, Indonesia still has the highest MMR. Hemorrhage accounts for 30% of deaths, eclampsia 25%, postpartum infection 12%, abortion 5%, and postpartum complications 16% [4].

In East Java, 54 percent of maternal deaths in 2017 occurred between 0 and 42 days postpartum, according to statistics from the East Java Provincial Health Office. However, 21% occurred during labor, and 25% occurred during the mother's pregnancy (East Java Health Office, 2017). This still indicates a high MMR during the postpartum period due to complications and infections.

Central and lateral placenta previa, narrow pelvis, cephalopelvic disproportion, threat of uterine rupture, prolonged labor, uneventful labor, preeclampsia, cervical dystocia, and fetal malpresentation are some of the abnormalities/obstacles in the labor process that prevent the baby from being born normally or spontaneously. Sectio Caesarea (CS), a surgical

Received: 10 May , 2025
Revised: 12 June, 2025
Accepted: 04 July, 2025
Published: 09 July, 2025
Curr. Ver.: 09 July, 2025

technique, is necessary in certain circumstances. Both medical and non-medical methods can be used to manage post-Cesarean section wound healing. Changing the bandage on the surgical area once a day is an example of medical postoperative care. In contrast, non-medical postoperative care includes the consumption of high-protein foods, such as curry fish [5].

Table 1. Respondent characteristics

Description	Frequency	Percent
Mother's Age		
20-30	**15**	**55%**
31-40	**12**	**45%**
Total	**27**	**100%**
Mother's Occupation		
HOUSEWIFE	**16**	**59%**
Employee	**11**	**41%**
Total	**27**	**100%**
Mother's Education		
JUNIOR HIGH SCHOOL	**5**	**18%**
HIGH SCHOOL	**10**	**37%**
S1	**12**	**45%**
Total	**27**	**100%**

2. Proposed Method

This study used a non-equivalent quasi-experimental research approach. The sample of this study consisted of 27 respondents, all of whom were mothers who underwent caesarean section at Dr. Shodiq Clinic Jember during March and April 2025. The researcher's sampling strategy was This sampling technique is referred to as non-probability sampling, which is a sample selection procedure that gives each component or member of the population an equal chance of being selected. A total of 27 participants were sampled in this study.

The effect of curse fish is the independent variable, while post-cesarean section wound healing is the dependent variable. An observation sheet was used as a research tool. Dr. Shodiq Jember Clinic was the location of this study. Data processing was done by editing, coding REEDA scale, processing, cleaning data, Wilcoxon test, and U-mann-whitney test.

3. Results and Discussion

General Data of Respondents

Based on table 1 above, 12 people (45%) were between 31-40 years old, while 15 people (55%) were between 20-30 years old. The mother's occupation, including information on 16 housewives (59%) and 11 employees (41%). A total of 5 people (18%), 10 people (37%), and 12 people (45%) had a college education, but the mother had just finished junior high school.

The post-cesarean section wound condition of the experimental and control groups before receiving Ikan Kutuk.

Table 1. Post-cesarean section wound condition in experimental and control groups (N=27) before receiving curse fish extract.

Group				
Wound Condition	Experiment		Control	
	n	%	n	%
Good	10	37	9	33
Not good	17	63	18	67
Total	27	100	27	100

Table 1 shows that the majority of post-cesarean wounds in the experimental group, which included 17 people (63%), were in poor condition before receiving catfish, while wounds in the control group, which included 18 people (64%), were also in poor condition.

Post-cesarean wound condition in the Experimental and Control groups after catfish administration.

Table 2. Post-cesarean wound condition in experimental and control groups (N=27) after consuming curse fish

Group				
Wound Condition	Experiment		Control	
	n	%	n	%
Good	23	85	4	15
Not good	4	15	23	85
Total	27	100	27	100

In Table 2, it can be seen that the post-caesarean wounds in the experimental group of 23 postpartum women (85%) were in generally good condition after catfish administration, while the wounds in the control group of 23 postpartum women (85%) were in poor condition.

The effect of catfish extract administration affected the healing time of post-SC wounds in the Experimental and Control groups.

The following normality test was performed before the bivariate test: Distribution of Post-Cesarean Section Injuries (Table 3) Normality Test for REEDA Scale The Shapiro-Wilk test results of the SPSS normality test had a significance value of less than 0.000, as shown in Table 3. A significance value of less than 0.05 indicates that the data is not normally distributed.

Table 3. Impact of Curse Fish Use on Post-Caesarean Condition

Group	Wound Condition	Curse Fish Administration				Asymp Sig-
		Before		After		
		N	%	N	%	
Experiment Group	Good	10	37	23	85	0.003
	Not good	17	63	4	15	
Control Group	Good	9	37	4	15	1.000
	Poor	18	67	23	85	

The experimental group was in poor condition before receiving catfish (17, or 63%) and after receiving the wound, 4 (15%), as shown in table 4.8. While in the control group before being given curse fish, the condition was unfavorable as many as 18 (67%) and after 23 (85%).

Based on the data above, Wilcoxon analysis showed that the duration of post-SC wound healing in the experimental group was influenced by the use of catfish, as evidenced by the Asym.sig value of 0.003 and p value (0.003) <0.05, which means rejecting Ho data and accepting H1. The duration of post-SC wound healing in postpartum women at Dr. Shodiq Jember Clinic was not influenced by the use of catfish extract, as evidenced by the Asym sig value = 1.000 (p value > 0.05) in the control group, which means rejecting Ha and accepting H1.

Discussion

Table 1 shows that the Wilcoxon Test statistical test resulted in 0.000 for the p value. If the p value (0.000) is below 0.05, then Ho is rejected and Ha is accepted. The length of wound healing after Caesarean section at Dr. Shodiq Clinic Jember is proven to be influenced by the effectiveness of catfish extract. Tungadi (2019) found that the results of this study were in accordance with the study. People, especially mothers who have undergone cesarean section, can find out the benefits of consuming cork fish for wound healing through print media. One way to teach people about the benefits of eating cork fish is to provide information in the form of brochures. Brochures are printed media that use design applications to promote health to the general public. The brochure is 12 pages long and measures 3.5 x 8.5 inches [6]. Research conducted by Ade Nurhikmah, Retno Widowati, and Dewi Kurniati in 2020 is in line with the findings of this study. In the group that consumed cork fish on the third day, the average cesarean section wound healing score was 4.19; on the seventh day, 2.25; and on the tenth day, 1.0. After cesarean section, the mean wound healing scores of the control group were 4.75 on the third day, 3.69 on the seventh day, and 2.63 on the tenth day. There was no significant difference (p>0.05) between the cesarean section wound healing scores of the treatment group and the control group [7]. This study hypothesizes that to accelerate the healing process, individuals undergoing caesarean section should focus on consuming foods that are high in calories and protein. In addition to the importance of good nutrition, a growing problem in modern society is that there are still many myths that have an impact on the health of postpartum mothers, especially those who give birth by caesarean section. For example, some people believe that foods such as meat, eggs and shrimp will aggravate the stitches. In fact, these foods are very important for the wound healing process. Therefore, consuming catfish is one alternative to accelerate the healing of surgical suture wounds, especially post-cesarean section suture wounds. This is because catfish contains protein or albumin which is quite high.

The findings of this study support and strengthen previous research regarding the effectiveness of snakehead fish (Channa striata) extract in accelerating post-cesarean section wound healing. Consistent with the results of Fajri et al. (2018), the administration of snakehead fish extract led to a significantly faster improvement in wound status among postpartum mothers, particularly those with anemia, compared to the control group. Their study demonstrated that wound healing in the intervention group was superior from day five and remained consistently better up to day fifteen, highlighting the importance of albumin and high-quality protein in tissue regeneration and cellular repair[8].

Similarly, Purba et al. (2020) found that 82.4% of mothers in the intervention group who consumed snakehead fish experienced rapid wound healing post-cesarean, while only 23.5% in the control group achieved similar outcomes. This significant difference is attributed to the rich albumin content of snakehead fish, which plays a central role in supporting new tissue formation, improving cell metabolism, and expediting recovery. Both this study and the present research also reveal the persistence of cultural myths that restrict the intake of protein-rich foods during the postpartum period, despite clear scientific evidence demonstrating their benefits for surgical wound healing[9].

Furthermore, the study by Indra (2019) reinforces these findings by showing that administration of snakehead fish capsules resulted in a significant shift from moderate to good wound healing among post-cesarean patients, with almost all participants in the intervention group experiencing marked improvement. The practicality of administering snakehead fish in capsule or extract form, as highlighted by Indra and reflected in the current study, addresses common barriers to fish consumption such as aversion to odor and taste, making this intervention more accessible and acceptable in clinical practice[10].

Collectively, these studies, along with the present findings, confirm that snakehead fish is a superior nutritional intervention for post-cesarean wound healing due to its high albumin and protein content. Incorporating snakehead fish, either as extract or capsules, into postoperative care protocols can significantly enhance recovery outcomes for mothers after cesarean section. These findings also emphasize the need for continuous public health education to address persistent dietary myths and encourage the adoption of evidence-based nutritional practices in postoperative care.

4. Conclusions

Post-cesarean section wounds can be healed effectively by administering curse fish juice. This is because catfish has higher albumin levels than eggs and is more easily digested by the body. Curse fish is good for wound healing because of its high albumin protein content. So far, people think that curse fish can accelerate wound healing in the long term. However, due to its fishy taste and aroma, some people dislike or hesitate to consume curse fish. Thus, if curse fish juice is processed in this way, it will be easier to drink and the healing process will proceed more easily.

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