

## ORIGINAL ARTICLE

# Implementation of Geliat Program From Universitas Airlangga: Improving Maternal Health Along With Satisfaction of Women and Midwifery Students

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## ABSTRACT

**Introduction:** The national survey results showed that the Maternal Mortality Rate (MMR) in Indonesia is 305, while the target in 2024 is 232 per 100,000 live births. GELIAT Unair stands for Healthy Mother and Child Care Movement as a project of Universitas Airlangga that include an assistance program (continuity of care from pregnancy to postpartum) for women who carried out by learners, particularly midwifery students. **Methods:** To examine the satisfaction of GELIAT's participants while implementing the program. **Methods** The study uses a quantitative research design applying descriptive observation by collecting data using an online questionnaire. The research respondents included 44 companions and 38 postpartum mothers who carried out by purposive sampling. The inclusion criteria included postpartum mothers who had received assistance since pregnancy and did not experience obstetric complications. The inclusion criteria for companions were midwifery students who had accompanied the mother from pregnancy to the postpartum period. The exclusion criteria were mothers and companions who could not access the online questionnaire. **Results:** 68.42% of postpartum mothers were delighted with the GELIAT Unair mentoring program, and 94.4% of respondents got benefited, and 97.37% of mothers would recommend the Unair GELIAT mentoring program for others. Another notable finding, many women are willing to receive assistance again during their subsequent pregnancy. Additionally, 70% of the mothers were happy when assisting, and 82% of the companions said that they got the opportunity to improve their communication skills. However, the students also felt that several obstacles were face including the mother not being cooperative, ineffective online communication, limited time when communicating, difficulty scheduling visits due to the mother's busyness, loss of contact, and the mother does not have a cellphone. **Conclusion:** The GELIAT Unair leads to enhanced maternal health and satisfaction for women and students. Communication is the main competency that must be possessed by a mother's companion so that activities can run optimally.

**Keywords:** Monitoring, Maternal Assistance, GELIAT Unair, Postpartum, Maternal mortality, Midwifery

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## INTRODUCTION

Maternal Mortality Rate (MMR) and Infant Mortality Rate (IMR) are the leading indicators of a country's health status. Indonesia is a country that has the fourth largest population in the world which has a high MMR (1). The 2015 National Population survey results show that MMR in Indonesia is 305 per 100,000 live births, while the target in 2024 is 232 per 100,000 live births(1). Many efforts have been made to reduce maternal mortality, namely

through strengthening the health system and health services using the Continuum of Care (CoC) approach. The Continuum of Care approach has effectively linked issues of importance to the health of mothers, newborns and children during adolescence, pregnancy, childbirth, the postnatal period and newborns and into childhood, establishing natural interactions throughout the life cycle(2).

The implementation of the MMR reduction program requires cross-program and cross-sector involvement. Across sectors involved in the program, the performance includes universities, think tanks, and private and community institutions. One of the strategies of the Ministry of Health and Higher Education is through

community empowerment. Community empowerment programs are needed to synergize health programs with universities that have the Tri Dharma of Higher Education (Education, Research and Community Service). One community service activity is mentoring pregnant women by students. Research results from the Research and Development Center for Public Health Efforts at the Health Research and Development Agency stated that mothers who received assistance could increase their knowledge by 3.3% compared to mothers who did not receive assistance(3).

GELIAT Unair is one of UNICEF’s programs and the Institute for Research and Community Service, Universitas Airlangga (LPPM Unair), which plays an active role in carrying out activities to care for maternal and child health. Maternal mentoring activity is one form of activity carried out by GELIAT. Continuity of Care (CoC) is one of the learning programs in the Midwifery Study Program at the Faculty of Medicine, Universitas Airlangga, which aims to provide a sustainable learning experience for midwifery care. CoC with GELIAT Unair is a structured and planned learning and community service activity through mothers’ assistance from pregnancy to postpartum and infant care. The duration of time for mentoring is approximately 3 semesters or 18 months. The initial plan for mentoring activities was to be carried out through home visits, but since the COVID-19 pandemic, mentoring activities have also been carried out online. This study aims to monitor and evaluate maternal mentoring activities carried out by GELIAT Unair by assessing the program participants’ satisfaction and experience.

**MATERIALS AND METHODS**

The research method used was observational with a descriptive design. Data was collected using an online questionnaire. The study was conducted on 44 students as companions and 38 mothers who had been assisted since pregnancy. The selection of respondents was carried out by purposive sampling. The study’s inclusion criteria for maternal respondents were mothers who had received assistance from pregnancy to childbirth.

In contrast, the exclusion criteria were mothers who could not fill out an online questionnaire because they were unfamiliar and unwilling. The inclusion criteria for companion respondents were students who had assisted pregnancy to the puerperium. In contrast, the exclusion criteria were students who did not continuously accompany the mother from pregnancy, childbirth, and postpartum. Students who provide assistance are midwifery students in the professional programme or the ninth semester. The mother assistance programme is carried out for 2 semesters or 1 year.

The research was conducted at Puskesmas Krembangan Selatan, Puskesmas Simomulyo, Puskesmas Tenggilis

and Puskesmas Jagir Kota Surabaya in November 2020. The variables studied in this study that were asked to mothers were mother’s satisfaction, benefits felt by mothers, and recommendations to others. Meanwhile, the variables that were asked to the students were the competencies obtained by the students, the impression when accompanying the program, and the limitations during the mentoring.

**ETHICAL APPROVAL**

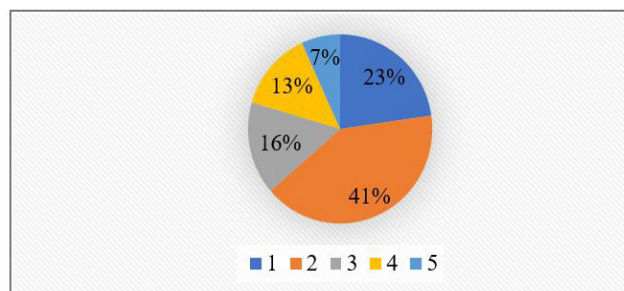
The research was declared an ethical pass test by the Ethics Committee of the Faculty of Medicine, Universitas Airlangga, Surabaya East Java Indonesia with Ref. No: 44/EC/KEPK/FKUA/2021

**RESULT**

Maternal mentoring projects have the main objective of monitoring the mother’s condition, so it is expected to detect pregnancy problems early and prevent delays in managing complications. Assistance projects start with pregnancy, childbirth and after birth. Assistance projects were carried out from February 2020 to January 2021. Since February 2020, mentoring activities were carried out using the home visit method, but since March 2020, the activities have been carried out online or by telemonitoring. Telemonitoring is an activity to monitor maternal health using online communication applications such as WhatsApp, telephone, and video calls. Telemonitoring is carried out due to the Covid-19 Pandemic so that companions have limitations to make face-to-face or offline visits. Data collection was carried out after the mentoring activity was completed in March 2021 for 1 month.

**Frequency of Visits**

Almost half (41%) of the assistance projects are carried out with an average of 2 visits per month (Figure 1). Activities carried out during the visit include assessment and providing health education. If during the appointment, the assistant finds that there is a problem, then the problem will be consulted with the supervisor from the campus and Puskesmas. For mothers who experience difficulties and need further management, the companions will facilitate the mother to make health facilities visits.



**Figure 1. The average frequency of visits in 1 month in 2020 in Surabaya**

### Satisfaction of Mothers

More than half (68.42%) of mothers were very satisfied with the assistance activities. There were 2.63% of mothers who were displeased because a companion did not accompany the childbirth process (Figure 2)

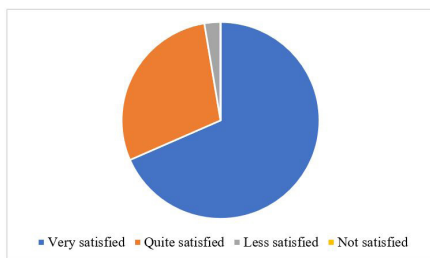


Figure 2. The level of satisfaction of mothers with assistance program in 2020 in Surabaya

### Benefits Perceived by Mothers

Most all (94.74%) mothers have benefited from the assistance projects. There were 5.26% of mothers who said they did not benefit from mentoring because mothers wished that the mentoring process was carried out in person or through home visits. They felt that online assistance had limitations (Figure 3).

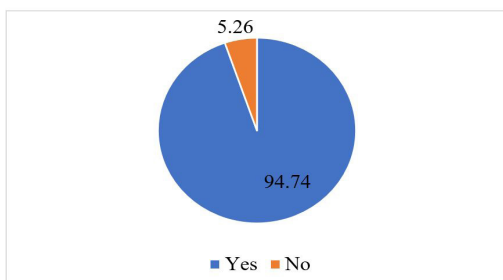


Figure 3. Benefits perceived by mothers during the mentoring program in 2020 in Surabaya

### Recommended to Others

The majority of mothers (97.37%) said they would recommend mentoring others around them. 2.63% said they did not recommend it because they were not satisfied with the assistance projects (Figure 4). Furthermore, whole mothers (100%) are willing to be accompanied again in their subsequent pregnancy.

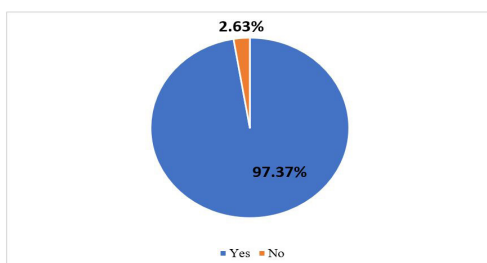


Figure 3. Benefits perceived by mothers during the mentoring program in 2020 in Surabaya

### Competencies Gained for Student.

Figure 5 explains that the majority (82%) of the competencies that companions get the most during mentoring activities is communication, while other competencies that can be obtained are character

understanding, problem management, patience and building mother's trust. The competencies gained assessment aims to evaluate the abilities obtained after participating in mentoring activities through self-evaluation.

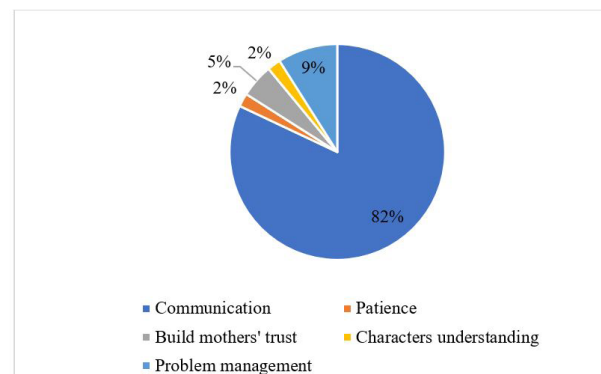


Figure 5. Competencies gained when assisting in 2020 in Surabaya

### Impressions when assisting program

Figure below explains that most (70%) companions have the impression of being content when doing mentoring activities (Figure 6).

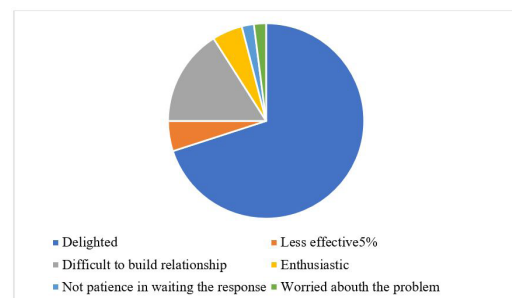


Figure 6. Impressions when assisting in 2020 in Surabaya

### Restrictions during Mentoring

Figure 8 explains that almost half (43%) of the assistants feel that the mother is not cooperative. Simultaneously, other obstacles are ineffective online communication, a limited time when communicating, difficulty scheduling visits due to mother's busyness, loss of contact, and the mother does not have a cellphone. In contrast, 7% of student companions do not feel any obstacles during mentoring activities (Figure 7).

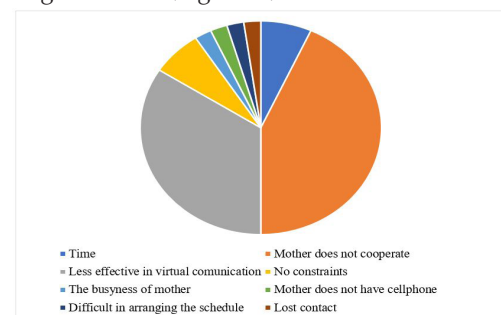


Figure 7. Constraints during mentoring in 2020 in Surabaya

## DISCUSSION

The Research and Development Center for Public Health Efforts and Research and Development Agency for Health in 2019 provides recommendations regarding pregnant women's assistance to optimize community service by students. One suggestion is to consider the benefits of the mentoring program to increase knowledge of pregnant women and the utilization of maternal and child health services and improve student skills. Also, there is a recommendation that the health department and Puskesmas need to increase monitoring and evaluation efforts of mentoring programs and follow up on findings of mentoring activities so the mentoring program can provide more leverage in expanding coverage of maternal and child health services(1). The monitoring and evaluation of maternal mentoring activities by GELIAT Unair is an effort to implement these recommendations.

Based on the latest Ministry of Health regulation No. 21 of 2021 explains that the minimum standard of visits for pregnant women is six times, namely one time in the first trimester, two times in the 2nd trimester, and three times in the third trimester, while the postpartum visit is at least four times, the first visit is done 6-48 hours after delivery, the second visit carried out at 3-7 days after delivery, the third visit was carried out at 8-28 days after delivery and the fourth visit was carried out at 29-42 days after delivery for the mother (2). Currently, there is no minimum standard of visits that the mentor must carry out, but the companion is expected to visit at least once a month at <28 weeks of gestation, every two weeks at 28 to 36 weeks of gestation, and every week at >36 weeks of gestation while during postpartum visits can be carried out according to the Ministry of Health's standards.

Most of the frequency of visits is carried out on average two times every month, and most online media is using WhatsApp. During the COVID-19 Pandemic, assistance activities were carried out online or commonly known as telemonitoring. Almost all assistance programs use the WhatsApp application while the lowest number use a combination of WhatsApp, Telephone and SMS. A total of 38 postpartum mothers who were willing and following the inclusion and exclusion criteria provided answers to the questionnaire given online. Maternal assistance was initially planned using the home visit method. Still, due to the COVID-19 pandemic, the technique used was online assistance according to the guidebook issued by the Ministry of Health regarding services for pregnant women, childbirth and postpartum during the COVID- 19 pandemic that visits during pregnancy, birth, and postpartum can be done through the method of direct visits to health facilities, home visits and online visits or telehealth/telemedicine(4). Pregnant women are a group that is vulnerable to contracting the COVID-19 virus, so that many recommendations aim

to explain the importance of social distancing and self-isolation for pregnant women. This is a reference for reducing direct face- to-face visits to pregnant women.

The majority of mothers were very satisfied with the mentoring activities. Patient satisfaction is one indicator to determine the quality of health services. Patient satisfaction is also an essential tool for monitoring and evaluating the quality of service that is patient/ client- centred. A satisfying experience when mentoring will increase maternal compliance in carrying out the recommendations and knowledge provided by the companions so that it can be concluded that increasing the satisfaction of postpartum mothers can have an indirect impact in reducing maternal morbidity and mortality. The effect of dissatisfaction with services affects mothers and affects babies who have been born, especially in the daily care of babies. Health workers, especially midwives, in increasing postpartum mothers' satisfaction, are vital factors. Postpartum mothers consider the competence of health workers as an assessment that supports dignity when getting services. Postpartum mothers want professional medical care, specific attention, and a midwife's responsive attitude (5). There are still mothers who feel dissatisfied with the assistance activities because they do not accompany them during childbirth. Many women want a companion who provides continuous support from pregnancy, childbirth and childbirth(6). The benefits of support supplied by companions during childbirth include shorter labour duration, increased spontaneous vaginal birth, decreased section caesarea (SC), increased maternal satisfaction, and reduced anxiety during childbirth(7).

Furthermore, almost all mothers have benefited from mentoring activities. Maternal assistance to provide support, especially during the final trimester of pregnancy, has particular benefits to reduce fear and increase self-efficacy during childbirth(8,9). There are still mothers who feel that they have not benefited from mentoring because mentoring is carried out online. This explains that the online mentoring method alone is not sufficient to provide benefits for mothers. A combination method is needed, namely, home visits. WHO recommends applying home visits by trained midwives or communities while still getting good supervision from health workers and emphasizing postpartum care quality, especially in problem identification and referral(10). Home visits are an approach to providing both medical and non-medical care to reduce limited access to provide social and health services to women, especially during pregnancy. Home visits are a strategy that the government can implement to improve mothers' quality during childbirth and childbirth, especially for pregnant women who do not have social support and have difficulty getting access to health service checks. Home visits are a method that can improve mental health and reduce depression during the puerperium(11,12).

Moreover, based on the findings, almost all mothers said they would recommend mentoring other people around them. All mothers were willing to be assisted again in their subsequent pregnancy, which is a form of mothers' response because mothers feel satisfied and get the benefits of assistance. Still, it needs to be considered for efforts to improve monitoring and evaluation results to increase the quality of mentoring services. Also, most of the competencies that assistants obtain during mentoring activities are communication, while other competencies that can be acquired are character understanding, problem management, patience and building mother's trust. Mentoring activities are beneficial for the health of mothers and students. A student is someone in a transitional period(13). Students need sufficient experience during the transition period so that after graduating, they have competencies following the desired learning outcomes. Mother's mentoring activities provide experiences to students, especially communication, cooperation, and empathy. Health students face many challenges during the clinical learning process. It is necessary to identify challenges during clinical learning. The main recommendations for preparing students are communication and psychological needs that students need during clinical education(14).

Most of the assistants have the impression of being content when doing mentoring projects. The feeling of being happy when doing mentoring can be due to the benefits obtained, the mother's acceptance being accompanied, or the interaction process between students and mentors during the learning process. Midwives as mentors make an enormous contribution to developing student experiences while learning in practice(15). The practice places for mentoring activities are in four health centre's target areas in Surabaya. Students are supervised by one lecturer and one midwife supervisor from the Puskesmas. Each student accompanies three mothers from pregnancy to childbirth. In addition, almost half of the assistants felt that the mother was not cooperative. Simultaneously, other obstacles were ineffective online communication, a limited time when communicating, difficulty scheduling visits due to mother's busyness, lost contact, and the mother did not have a cellular phone. Many midwifery students encounter challenges during clinical practice, lack of resources, relationships with supervisors, and supervisor support, so that clinical vehicle efforts are needed to overcome these problems(16). Natural settings and learning environments significantly affect the professional development of students(17). The primary need for midwifery student skills is communication because communication can affect maternal satisfaction, especially during childbirth care(18).

The maternal mentoring program by midwifery students and GELIAT forms an effort to equip students about the Continuum of Care. The continuum of care is

implemented through student assistance starting from pregnancy until the postpartum period is complete. When mentoring students carry out continuous care. Students also begin to plan the care that will be provided since the first time they meet the mother who is being accompanied. The principle of continuum of care will train students to have a comprehensive analysis and can provide sustainable care. A woman who receives continuous care from a midwife will have a positive birthing experience. This is related to the support provided during continuous care(19). Continuum of Care can be applied mainly during pregnancy, childbirth, and postpartum because of new mothers(20). Currently, maternal assistance has been carried out from pregnancy to the puerperium. Still, several studies have also shown that efforts to improve conception do not only begin during pregnancy but can also be done during the preconception period by involving various professions because it can prevent several problems in babies, for example, stunting(21). Midwifery graduates with autonomous and female-centred competence are strongly influenced by educators, the clinical practice environment, clinical counsellors and experience in providing sustainable care(22). Midwifery students must provide a continuum of care supported by professional midwives as mentors(23). The midwifery education curriculum needs to contain structural elements and concepts that focus on continuity of care (24,25).

## CONCLUSION

The monitoring and evaluation of the GELIAT Unair program, namely assistance to mothers by midwifery students, performed positive outcomes both in mothers who received assistance and students who assisted. This program is a form of student learning to practice providing sustainable care from pregnancy to the postpartum period. This program can increase maternal satisfaction during pregnancy and the puerperium and can provide an extraordinary learning experience for students in providing sustainable and women-focused care.

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