



저작자표시-비영리-변경금지 2.0 대한민국

이용자는 아래의 조건을 따르는 경우에 한하여 자유롭게

- 이 저작물을 복제, 배포, 전송, 전시, 공연 및 방송할 수 있습니다.

다음과 같은 조건을 따라야 합니다:



저작자표시. 귀하는 원저작자를 표시하여야 합니다.



비영리. 귀하는 이 저작물을 영리 목적으로 이용할 수 없습니다.



변경금지. 귀하는 이 저작물을 개작, 변형 또는 가공할 수 없습니다.

- 귀하는, 이 저작물의 재이용이나 배포의 경우, 이 저작물에 적용된 이용허락조건을 명확하게 나타내어야 합니다.
- 저작권자로부터 별도의 허가를 받으면 이러한 조건들은 적용되지 않습니다.

저작권법에 따른 이용자의 권리는 위의 내용에 의하여 영향을 받지 않습니다.

이것은 [이용허락규약\(Legal Code\)](#)을 이해하기 쉽게 요약한 것입니다.

[Disclaimer](#)

**Impact of Functional Literacy Education Program
on the Livelihoods of Underprivileged Women in
Rural Tikapur, Nepal**

Joong Seon Na

**The Graduate School
Yonsei University
Department of Medicine**

**Impact of Functional Literacy Education Program on the
Livelihoods of Underprivileged Women in Rural Tikapur,
Nepal**

Directed by Professor Kyu-Jae Lee

A Doctoral Dissertation

Submitted to the Department of Global Medical Science and
the Graduate School of Yonsei University
in Partial Fulfillment of the Requirements for the Degree of
Doctor of Philosophy in Medical Science

Joong Seon Na

August 2024

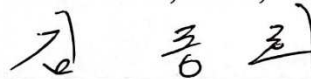
**This certifies that the Doctoral Dissertation of
Joong Seon Na is approved**



Prof. Kyu-Jae Lee, M.D., Ph.D.: Thesis Supervisor



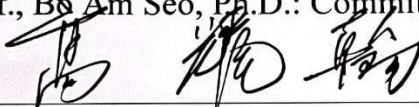
Prof. Soo-Ki Kim, M.D., Ph.D.: Committee Member



Prof. Dong-Heui Kim, Ph.D.: Committee Member



Prof., Ba Am Seo, Ph.D.: Committee Member



Prof., Goh Yo Han, Ph.D.: Committee Member

The Graduate School

Yonsei University

August 2024

ACKNOWLEDGEMENT

I would like to express my deepest appreciation and gratitude to the many people who have helped me achieve this significant milestone in my life at this prestigious university. First and foremost, I extend my heartfelt thanks to my committee members from Yonsei University, Wonju College of Medicine: Dr. Kyu-Jae Lee (my thesis supervisor), Dr. Soo-Ki Kim, Dr. Dong-Heui Kim, Dr. Bo Am Seo, and Dr. Goh Yo Han. Their unwavering support, guidance, insightful comments, and encouragement have been invaluable throughout my Ph.D. journey. I have particularly benefited from Prof. Kyu-Jae Lee's mentorship, learning a great deal from him about writing skills and critical thinking.

I am deeply blessed and thankful to be a part of the Department of Convergence Medicine, where I was embraced not just as a student but as a family member. I am immensely grateful for the knowledge, wisdom, and skills imparted to me, as well as for the patience, love, and grace shown to me. Special thanks go to Dr. Johny Bajgai and Mrs. Soon-Bong Song, who have always been there for me, sharing their knowledge and skills. I appreciate everything you have taught me, not just academically but also through your words of wisdom. Your efforts and patience have been greatly appreciated.

I am also grateful to my professors and colleagues at this university. The learning experience has been enriched by your presence, and my success would not have been possible without your help and support.

Lastly, I would like to thank my family and friends for their unwavering encouragement throughout this journey. Your love and prayers have been a constant source of strength. Thank you all.

TABLE OF CONTENTS

LIST OF FIGURES	IV
LIST OF TABLES	V
ABSTRACT.....	VII
I. INTRODUCTION	1
II. LITERATURE REVIEW.....	8
2.1. Concept of Functional Adult Literacy.....	8
2.2. Based on Freire’s Literacy Perspective.....	10
2.3. The Concept Adult Education Program in Nepal: Historical Background of Non-Formal Education in Nepal	11
III. METHODOLOGY	16
3.1. Study Area, Study Design and Selection of Participants	16
3.2. Data Collection Instruments and Measurements.....	20
3.3. Research Ethics	22
3.4. Data Analysis	22
IV. RESULTS	24

4.1. Baseline Characteristics of Participants	24
4.2. Women Participants' Response Regarding the Purpose of Participation in the Functional Literacy Education Program	26
4.3. Women Participants' Opinion Toward Satisfaction with the Functional Adult Literacy Education Program	28
4.4. Women Participants' Responses to the Functional Literacy Education Program in Empowering Livelihood.....	39
4.5. Women Participants' Responses to the Functional Literacy Education Program Regarding Knowledge About Menstrual Hygiene	43
4.6. Women Participants' Responses to the Functional Education Literacy Program Regarding Knowledge About Maternal and Child Health	47
4.7. Correlations (Spearman's rho) Between the Measures of Satisfaction Level of Functional Literacy Education Program Based on Training Course, Facilities, Trainers and General Overview of Training	53
4.8. Association between Sociodemographic Variables and Satisfaction with Functional Literacy Program by Participants.....	56
V. DISCUSSION	59
VI. CONCLUSION	67
VII. REFERENCES	69

VIII. PUBLICATION LIST	80
IX. ANNEX	81
X. ABSTRACT IN KOREAN.....	114

LIST OF FIGURES

Figure 1. Map of Nepal Indicating the Study Area.....	19
-------------------------------------------------------	----

LIST OF TABLES

Table 1. Baseline Characteristics of Research Participants	25
Table 2. Women Participants' Response Regarding the Purpose of Participation in the Functional Literacy Education Program	27
Table 3. Reliability Index of Participants' Opinions Toward Satisfaction with the Functional Literacy Education Program	29
Table 4. Women participants' opinions toward satisfaction with the functional literacy education program in rural settings of the Tikapur area, measured using the Likert scale	36
Table 5. Women's Participants' Responses to the Functional Education Literacy Program in Empowering Livelihood	41
Table 6. Women's Participants' Response Regarding the Contributions of the Functional Education Literacy Program to Knowledge About Menstrual Hygiene	45
Table 7. Women's Participants' Response Regarding the Contributions of the Functional Literacy Education Program to Knowledge About Maternal Health	48

Table 8. Correlations (Spearman's rho) Between the Measures of Satisfaction	
Level of Functional Literacy Education Program Based on Training Course,	
Facilities, Trainers and General Overview of Training	54
Table 9. Association Between Sociodemographic Variables and Satisfaction of	
Functional Literacy Program by Participants	57

ABSTRACT

Impact of Functional Literacy Education Program on the Livelihoods of Underprivileged Women in Rural Tikapur, Nepal

Joong Seon Na

Department of Medicine

The Graduate School, Yonsei University

Directed by Professor. Kyu-Jae Lee

Background: Women's empowerment and health literacy are essential for fostering community well-being. Empowering women through education and diverse training plays a crucial role in ensuring their prosperity and overall health. This study investigates the satisfaction and experiences of underprivileged rural mothers participating functional literacy education program on their lives in Kailali district, Nepal.

Methods: We assess participants' perceptions of program effectiveness, examining training content, facilities, trainers, while exploring menstrual hygiene practices and maternal health awareness. Through convenience sampling, 141 underprivileged women from five rural villages near Tikapur were selected from

literacy centers run by Mahima Group. Structured questionnaires were utilized and statistical analyses, including descriptive, Spearman's rho correlation and Pearson chi-square test were conducted for data analysis.

Results: We found that 65.2% of participants expressed high satisfaction levels. Moreover, 96.5% found the program highly effective, with 97.9% reporting improved literacy skills and 96.5% demonstrating increased awareness of menstrual hygiene practices. Additionally, 97.2% agreed that the program enhanced maternal and child health knowledge. Significant correlations were observed among training course, facilities, trainers, and overall training perception. In line, significant associations were found between age groups ($p = 0.003$) and geographical areas ($p = 0.023$) with satisfaction levels of literacy program.

Conclusion: These results underscore the satisfaction of participants with the literacy program and its impact on their lives and advocate for its broader implementation to empower marginalized communities for sustainable development.

Keywords: illiteracy; functional literacy education program; health literacy; rural women; underprivileged

I. INTRODUCTION

Education stands as a potent tool for fostering societal transformation and is universally acknowledged as an essential human right applicable across the lifespan. It is widely recognized as a cornerstone for achieving sustainable development and holds profound significance in the context of women's empowerment [1]. Furthermore, education plays an integral role in fostering not only physical well-being but also mental faculties such as critical reasoning, emotional regulation, and adept social interaction skills [2]. Additionally, education has been identified as a pivotal determinant for fostering adequate health literacy and, consequently, promoting overall well-being. Health literacy is defined as "personal knowledge and competencies that empower individuals to access, comprehend, evaluate, and utilize information and services to foster and sustain good health and well-being for themselves and their communities"[3]. Studies have reported that globally, more than 80% of individuals living in poverty reside in rural areas, with approximately 70% of this demographic being women. Furthermore, on a global scale, the number of illiterate individuals exceeds 750 million, with nearly half of this population concentrated in South Asian countries [4, 5]. Women's education plays a pivotal role in developing a sense of self-worth, improving knowledge, creating good practices for public

health awareness, and strengthening family bonds and social relationships, which are important for a country's economic and sustainable development [6, 7]. However, many women in several low- and middle-income countries remain deprived of formal education [7]. To alleviate these problems, such people must have alternative opportunities to receive education. A previous study reports that knowledge can be achieved through three different modes—formal, non-formal, and informal [8]. In numerous cases, the non-formal education approach is recognized as a complementary framework to formal education, with functional literacy education programs serving as a prominent example. These programs are specifically structured to aid adults in navigating the practical challenges encountered in their daily lives. Studies have demonstrated functional adult literacy program as a holistic initiative designed to provide individuals with vital skills such as reading, writing, numerical calculation, and basic vocational competencies. These programs address various aspects, including family literacy, health promotion, empowerment, and economic self-sufficiency. Additionally, by targeting both literacy and livelihood goals, these types of programs play a crucial role in improving economic, societal, and family-related out-comes, particularly for vulnerable populations. Moreover, these programs serve as vital strategies for empowering individuals living in poverty, facilitating livelihood enhancement and social mobility [9, 10, 11, 12]. In addition, functional adult literacy programs are

recognized for their pivotal role in enhancing cognitive development, fostering critical thinking, and problem-solving skills essential for adopting healthy behaviors [13]. They contribute to shaping health literacy directly through participation in health literacy courses and indirectly through the promotion of literacy, numeracy, communication, and social skills. Proficiency in reading, writing, advanced cognitive abilities, and social skills are essential prerequisites for achieving health literacy. Research indicates that functional adult education positively influences understanding health information and related systems by improving communication and writing skills. Furthermore, it fosters increased self-esteem and self-efficacy, crucial for effectively coping with challenging situations and facilitating successful health behavior change [14, 15, 16, 17, 18]. A previously published study indicated that adults lacking literacy skills often experience poorer health outcomes and have limited engagement with their communities [19]. Conversely, another study highlighted that participants participated in functional education programs exhibited increased vocalization in effecting societal change and demonstrated a greater capacity to enhance their socioeconomic circumstances [20].

Unlike many low- and middle-income countries, Nepali women have low-level access to education, healthcare, and socioeconomic opportunities, especially in the rural parts of the country [21]. Within Nepal's patriarchal societal structure,

women often lack autonomy, contend with discrimination, and contend with male-dominated hierarchies. Traditionally, women bear the dual responsibilities of caregiving for their families and managing household tasks [22]. Consequently, they are frequently marginalized in terms of educational opportunities. Of these, it has been reported that the male literacy rate in the country is significantly higher (76.4%) than that of females (53.1%). These data show a huge disparity in literacy rates between both genders in Nepal [23, 24]. Additionally, studies have suggested that menstrual hygiene practices are poor in many rural areas of the Far-Western Development Region of Nepal, also known as Sudurpaschim province. Menstrual exile in this region is popularly known as chhaupadi (menstruation women), in which poor menstrual hygiene has been practiced, as menstruating women and girls traditionally reside in unhygienic sheds for four consecutive days, which is unsafe and lacks basic necessities. Consequently, women suffer from several health issues, including urinary and reproductive tract infections [25, 26]. This social taboo is exacerbated in these societies due to prevalent illiteracy and lack of access to health-related knowledge. In Nepal, maternal and neonatal health remains a significant public health concern, with an estimated maternal mortality rate of 239 per 100,000 live births and neonatal mortality rate of 21 per 1,000 live births [27]. However, the utilization of maternal and neonatal health services faces various barriers, including inadequate education on maternal and child health, low

health literacy, cultural norms, financial constraints, and societal disparities [28, 29]. Particularly, underprivileged rural women encounter numerous challenges accessing maternal healthcare services due to factors such as caste identity and economic deprivation. For instance, women from Dalit caste groups in Nepal exhibit lower rates of maternal health service utilization [30, 31]. To address these barriers, health promotion and education are essential strategies for improving maternal health outcomes, along with advancing the status of women within society [32, 33]. One study in Nepal reported that mothers' educational levels determined and influenced the utilization of maternal health services in rural communities [34]. Educating women and facilitating their mobility can play a pivotal role in fostering innovation, while also nurturing confidence in engaging with broader segments of society [32]. Therefore, in developing nations like Nepal, it is imperative to tailor functional literacy education programs to address the specific contextual needs of learners. This approach ensures that programs are not only more effective but also more relevant and impactful in the lives of participants. Previous studies have indicated that functional literacy programs enhance adult learners' innovative and creative skills by reshaping their contexts and life objectives through engaging in productive activities [35, 36].

Nepal's Sudurpaschim province (Province 7) is notably the most underdeveloped area among all five development regions in Nepal, as highlighted by the Human

Development and Poverty Index [37]. Access to healthcare and education is particularly deficient here, with poverty representing a pervasive challenge [38, 39]. Moreover, additional factors such as chhaupadi practices and limited access to maternal and child health facilities further exacerbate the hardships faced by residents [25, 26, 40]. Additionally, women in this region confront persistent challenges including illiteracy, domestic violence, and restricted rights [41]. Approximately, half of the female population in this region lack basic literacy skills, and less than 5 percent own property, including land or homes. A significant portion of the population belongs to marginalized and indigenous communities, including the Tharu and Dalit ethnic groups [42, 43]. In light of these profound challenges, our collaboration with the Mahima Group, a local non-governmental organization (NGO) located in Tikapur, Kailali, Nepal, assumes critical importance. We shared a dedication to address pressing issues in Sudurpaschim province faced by marginalized women —especially mothers—in five distinct rural villages within the periphery of Tikapur region situated in Kailali district of this province. The Mahima group is dedicated to empowering women from marginalized underprivileged communities, including the Tharu and Dalit ethnic groups through functional literacy education, awareness programs, and income-generating projects, facilitated by social mobilization and collective participation. Through collaborative efforts and community participation, we

aspire to contribute to the advancement of these region in terms of socio-development and health awareness.

Therefore, this study aimed to investigate participants' satisfaction and experience regarding their participation in the functional adult literacy education program and its outcomes on enhancing their livelihoods. Additionally, the researchers aimed to verify correlations between measures of the training program. To achieve this objective, the researchers intended to answer the following basic research questions:

- i) What is the level of satisfaction among underprivileged rural women participating in functional literacy programs?
- ii) How effective are literacy programs in improving literacy skills and perceptions of participants regarding the effectiveness of the functional literacy education program in terms of training course, facilities, trainers?
- iii) What impact do literacy programs have on the health knowledge, particularly menstrual hygiene and maternal health, and practices of underprivileged rural women in Kailali district, Nepal?

II. LITERATURE REVIEW

2.1. Concept of Functional Adult Literacy

Rogers (1996) highlights the evolving nature of literacy definitions, acknowledging its diverse meanings across contexts and periods [44]. Different literacy skills are necessary for effective daily functioning in various situations. The EFA Global Monitoring Report (2006) defines literacy, following UNESCO, as the ability to engage in activities where literacy is essential for personal, group, and community functioning, as well as for continued use of reading, writing, and calculation for individual and communal development [45]. The World Bank Source book (2002) emphasizes that basic education significantly contributes to social and economic progress [46]. UNICEF (1999) defines Functional Adult Literacy (FAL) as enabling individuals to participate in activities requiring literacy for effective functioning and continued use of reading, writing, and calculation for personal and community development [47]. In Southern nations, adult education focuses on reducing non-literacy and providing mandatory learning for disadvantaged adults [48]. Governments, international organizations, and NGOs acknowledge the challenges posed by non-literacy and agree on the necessity to eliminate it, especially for women, by promoting the acquisition of

basic skills [49]. The role of businesses and communication in societies is crucial, but a study suggests that effective functioning in the community is hindered when an individual is non-literate [50]. Literacy, particularly for women, plays a vital role in development, as indicated by studies showing that FAL programs enhance individual productivity and transform economic lives [51]. Women's welfare and self-confidence are positively influenced by the application of literacy skills learned, as demonstrated by a Nepal study where literacy skills enabled women to manage household finances effectively [52]. Research in Uganda revealed that FAL participants were primarily motivated by economic activities, leading to enhanced literacy skills contributing to better financial management, increased savings, and investments [53]. The above studies suggest a correlation between women's literacy and economic development, emphasizing that a well-designed literacy program can impart skills and knowledge, making participants more productive. In Pakistan, women with high literacy levels earned 95% more than those without literacy skills [54]. Conversely, women in India with lower literacy levels faced financial and social constraints, hampering their pursuit of life goals due to a lack of useful knowledge in dealing with written text compared to literate individuals [55]. In Uganda, studies indicate that low-income women benefiting from non-formal learning programs are more likely to experience material benefits [56]. Takayanagi (2013) supports this idea, asserting that literate

individuals, like women, are more inclined to participate in income-generating activities and experience empowerment [57]. The concept of literacy extends beyond symbol recognition to adults learning to read and write for understanding, aligning with Freire and Macedo's (1987) perspective that literacy empowers individuals to comprehend and represent the world. Paulo Freire's belief that empowerment is the primary goal of education underscores the importance of women claiming their learning spaces despite constraints [58].

2.2. Based on Freire's Literacy Perspective

Freire's literacy theory centers on the concepts of agency and inclusion, emphasizing conscientization as a crucial aspect of education. Conscientization, as highlighted by the Brazilian educator Freire, involves teachers intentionally opening learners' minds to understand their surroundings and social structures that oppress and marginalize, such as patriarchy. Freire contends that adult literacy, according to his teaching methodology, can contribute to social improvement by challenging unjust power structures. Literacy, in Freire's view, should go beyond imparting basic reading and writing skills to foster effective functioning and development at individual, group, and community levels. His perspective aligns with agency theory, emphasizing conscientization and dialogue as tools for empowering marginalized individuals, particularly women, to become agents of

social change and engage in health promotion behaviors. Conscientization enables women to recognize social challenges in their lives, aligning with Freire's notion that a lack of consciousness and critical inquiry can hinder social change, especially for non-literate women. Women with FAL skills are encouraged to act as active members in their families and communities [58, 59].

2.3. The Concept Adult Education Program in Nepal: Historical Background of Non-Formal Education in Nepal

The functionality of adult literacy was introduced to Nepal in the mid-twentieth century. In 1971, the National Education System Plan outlined the implementation of adult education through two forms: the Literacy Extension Program and the Functional Adult Education Program, targeting 100,000 beneficiaries each year. Historically, these programs have primarily focused on rural development. A pilot project, "Education for Rural Development," was launched in 1981 in the Seti Zone, supported by UNESCO, UNDP, and UNICEF. This initiative included a significant component on functional literacy, providing reading materials to raise awareness among adults about new ideas, skills, and knowledge to empower them to enhance their quality of life. Several current programs, including the out-of-school program, flexible schooling program, women's literacy program, and community learning center, were successfully piloted under the Seti project.

Despite the development and implementation of various non-formal literacy programs over decades, Nepal's quantitative achievements have been unsatisfactory. The 2001 census revealed that nearly 46 percent of the country's population remains illiterate. In the context of Nepal, education is regarded as a powerful tool to address poverty by enhancing people's capacity through appropriate knowledge and skills for economic and social prosperity. It is considered the initial step in promoting education and improving the status of the poor, women, and marginalized groups. Literacy, seen as a continuum of knowledge and skills, is foundational to the economic and social development of individuals and the country.

The distinctive national definition of non-formal education in Nepal has evolved as a response to the need for expanding adult education programs. The term "Adult Education" was replaced by "non-formal education" in the Education Regulation of 2002. This change broadened the scope of educational programs to include various activities:

- i) Basic Adult Education Program: Focused on providing fundamental education to adults.
- ii) Post-literacy Education: Aimed at continuing education for those who have acquired basic literacy skills.

- iii) Continuous Education: Providing ongoing education beyond basic literacy to meet the evolving needs of learners.
- iv) Alternative Primary Education: Offering an alternative pathway to primary education, likely targeting individuals who missed formal primary education.

The term "non-formal" is applied to these programs because they deviate from traditional formal education settings. While some non-formal programs still utilize formal education settings and instructional methods, the key distinction lies in the fact that non-formal classes do not adhere to the typical structure of formal schools. Unlike formal education with 6/7 hours of daily teaching during the day or morning, non-formal education programs operate with more flexibility in terms of timing and structure.

In essence, the distinctive feature of non-formal education in Nepal lies in its adaptability and flexibility, catering to the specific needs of adult learners while incorporating elements of functionality, such as immediate applicability of skills and knowledge for neo-literates [60].

In the 1980s and 1990s, literacy programs in Nepal, whether initiated by NGOs or the government, were characterized by evening classes following a 6-month basic literacy course named Naya Goreto. Despite drawing on Freire's methodology, the

course mainly focused on development concerns, utilizing a key-word approach with pictures for discussion. Classes were conducted in Nepali by locally trained individuals, but a significant dropout rate, especially among women attending night classes, prompted redesign efforts, including self-study alternatives. The Maoist insurgency in the 2000s led to substantial changes, transitioning classes to daytime due to security concerns. The relationship between formal and non-formal education has been a consistent concern, with ongoing efforts to align the two for participants to gain qualifications. Recent developments, such as the establishment of a 'women's school,' signal a return to a more traditional school-like approach, emphasizing qualification attainment. In the 1990s, the exclusive reliance on the Naya Goreto literacy primer faced criticism for its cultural bias, prompting calls for diversification to meet local needs. Challenges persisted, including distribution issues and concerns about reaching remote areas. The push for mother tongue education gained momentum after 1990, with the government currently implementing mother tongue literacy courses, addressing cultural aspects. Despite challenges in distribution, private publishers have diversified available reading materials. The political awareness spurred by the Maoist movement shifted the discourse towards scaling up mother tongue literacy, and debates on federalism may positively impact literacy materials in minority languages. However, the government's Non-Formal Education Policy lacks

mention of introducing English in adult programs, despite potential demand from migration and an increased focus on English teaching in schools [61].

III. METHODOLOGY

3.1. Study Area, Study Design and Selection of Participants

This cross-sectional study was conducted in five neighboring villages (Nuklipur, Bankatti, Chamelipur, Durgauli, and Laikpur) within a 5-kilometer radius of the Tikapur region, located in the Kailali district of the Sudurpaschim province (Figure 1), Nepal. According to a report by the Central Bureau of Statistics (2021), the Kailali district had a population of 904,666 (men: 433,456; women: 471,210), with approximately 51.97% residing in rural areas. Among the female population, approximately 40.05% were reported as illiterate [62]. The region is predominantly marked by poverty and inhabited by marginalized communities [42,43]. The Mahima Group, a local non-profit NGO operating in this area, focuses on the welfare of the underprivileged groups such as the Dalit, Tharu, ex-Kamaiya families, women—particularly mothers—and the impoverished. The Functional Literacy Education Program was initiated by the Mahima Group in collaboration with our team as a pilot program from December 2013 to December 2015, was implemented in five neighboring villages within a 5-kilometer radius of the Tikapur region—Nuklipur, Bankatti, Chamelipur, Durgauli, and Laikpur. These villages are home to many women from

underprivileged communities, characterized by poverty, illiteracy, and limited awareness of menstrual hygiene and maternal health. Recognizing this need, the Mahima Group established functional literacy centers in these areas with the goal of educating underprivileged women and promoting health awareness among them. Hence, these villages were selected as the focus areas for our study.

A total of 255 underprivileged illiterate women participated in this program across five different centers from December 2013 to December 2015. The literacy course was divided into two parts: a six-month basic literacy course focusing on fundamental reading, writing, and numeracy skills, along with confidence-building exercises that provided women with a platform to address daily challenges and advocate against injustice. This was followed by a six-month post-literacy course, which reinforced the basics of reading, writing, and counting skills while incorporating practical exercises and discussions on day-to-day issues in their work, family, and community, with an emphasis on problem-solving approaches. Classes were held six days a week, customized to the participants' convenience, and facilitated discussions between participants and trainers. Each class session was divided into four segments: the first for reviewing and reflecting on the previous day's learning, the second

for discussing new topics relevant to their experiences and challenges, the third for introducing and practicing new vocabulary, and the fourth for developing action plans and strategies for awareness campaigns and community out-reach programs. The reading and learning materials utilized were contextualized to local settings, drawing upon real-life experiences, successes, and challenges. In our current study, 141 out of the 255 participants who engaged in both the basic and post-literacy courses of the literacy education program voluntarily participated. We employed a convenience sampling technique [63, 64], selecting individuals who were readily available and willing to take part. The inclusion criteria for participants were: i) participants must have completed both the basic and post-literacy courses of the functional literacy education program, and ii) they had to be residing in any of the five villages included in the study, available during survey period and willing to participate voluntarily. Data collection was supervised by a well-trained researcher, focusing on participants above the age of 18. Prior to data collection, all participants were briefed on the survey's purpose, and informed written consent was obtained from participants.

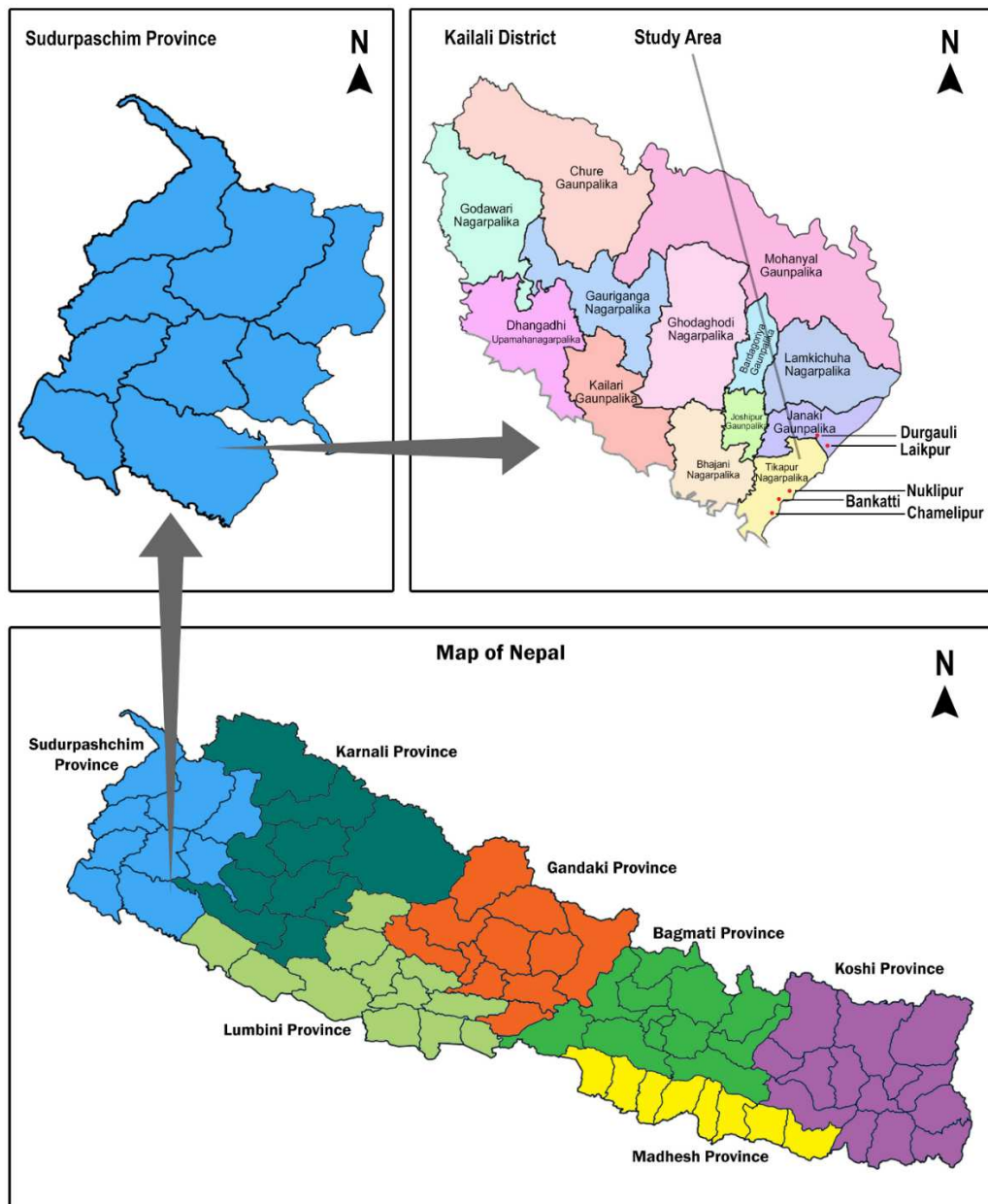


Figure 1. Map of Nepal Indicating the Study Area.

3.2. Data Collection Instruments and Measurements

In this study, the researchers developed a comprehensive questionnaire and conducted survey to gather data from the participants. The questionnaire was structured around a five-point Likert-scale and was organized into four main sections. I) Training courses; this part focused on evaluating participants' opinions regarding the effectiveness, relevance, and comprehensiveness of the training courses offered as part of the literacy program. II) Facilities; this part focused on to provide participants' feedback based on the adequacy and accessibility of the facilities provided during the literacy program, including infrastructure, materials, and resources. III) Trainers; this part aimed to assess participants' perceptions of the trainers' competency, communication skills, and ability to effectively deliver the content of the literacy program. IV) General overview of the literacy program; in this part participants were asked to give an overall assessment of the literacy program, including its outcomes on their lives, challenges faced, and suggestions for improvement.

In addition to the Likert-scale-based questions, a structured questionnaire approach was adopted. This encompassed a range of topics to gather comprehensive data from the participants such as motivation and purposes for participating in the literacy program; their satisfaction levels with various

aspects of the program; impact on the participants' knowledge and practices related to menstrual hygiene, maternal health, and child care and encouraged to share their views on potential improvements to the literacy education program, offering valuable feedback for future enhancements. The survey questionnaire was drafted in English and translated into Nepali language by native speaker and translated quality was assured by two native speakers. Participants were individually presented with the questionnaire by a trained researcher. Each question was explained thoroughly to ensure clarity, and participants were given ample time to respond. The re-searcher facilitated the data collection process, ensuring accuracy and consistency in responses. Participants were encouraged to provide honest and detailed feedback. The primary objective of the survey was to gather quantitative information from participants to evaluate the outcomes of the functional adult literacy education program on their daily lives. By collecting data on various aspects of the program, including participant satisfaction, perceived effectiveness, and areas for improvement, the study aimed to provide in-sights into the program's efficacy and inform future interventions.

3.3. Research Ethics

Prior to data collection, ethical considerations were carefully addressed. Informed consent was obtained from all participants, ensuring voluntary participation and confidentiality of responses. Participants were assured that their participation was anonymous and would not have any adverse consequences. This study was conducted in accordance with the Declaration of Helsinki, and approval of Ethics Committee of Nepal Health Research Council (Reg.no. 633/2023).

3.4. Data Analysis

After the data collection process, the researcher checked the completed questionnaires for completeness and precision. To test the reliability of the question items, the researchers calculated Cronbach's α as the reliability index for participants satisfaction survey with total four parameters (15 questions). The responses to the structured questionnaire were quantitatively analyzed using the Statistical Package for Social Sciences (SPSS) version 25. Additionally, satisfaction with the functional literacy education program parameters was analyzed through Spearman's rho Correlation. Association between sociodemographic variables and satisfaction of functional literacy program by participants was analyzed through Pearson chi-square test. Differences were

considered to be statistically significant at $p < 0.05$. All other results are summarized using frequencies and percentages, as presented in the tables.

IV. RESULTS

4.1. Baseline Characteristics of Participants

Data were collected from 141 participants from five different villages near the Tikapur re-gion: Nuklipur, Bankatti, Chamelipur, Durgauli, and Laikpur in the Sudurpaschim province, Nepal. The mean age of participants was 51.18 years, with a standard deviation of 10.15 years, indicating a moderate age range within the sample. The majority of participants identified as belonging to the Tharu caste (73%), followed by the Nepali caste (27%). Regarding religious affiliation, Hinduism was predominant among participants, with 91.5% identifying as Hindu and 8.5% as Christian. Geographically, participants were distributed across different areas, with Durgauli having the highest representation (35.5%), followed by Nuklipur (33.3%), Chamelipur (20.6%), Laikpur (6.4%), and Bankatti (4.3%)

Table 1.

Table 1. Baseline Characteristics of Research Participants

Items (N=141)		Frequency	Percentage (%)
Age (In years) Mean \pm SD		51.18 \pm 10.15	
Caste	Nepali	38	27%
	Tharu	103	73%
Religion	Christian	12	8.5%
	Hindu	129	91.5%
Area	Nuklipur	47	33.3%
	Bankatti	6	4.3%
	Chamelipur	29	20.6%
	Durgauli	50	35.5%
	Laikpur	9	6.4%

SD: standard deviation, N: number, %: percentage

4.2. Women Participants' Response Regarding the Purpose of Participation in the Functional Literacy Education Program

Table 2 displays the varied motivations of participants participating in the literacy program. The majority (72.3%) pursue for personal growth, while 7.1% aspire to have happier home lives. Additionally, 19.1% aim to contribute to community development, with a smaller proportion (1.4%) prioritizing work life improvement. These findings underscore the diverse reasons individuals engage in the program, emphasizing personal and community development.

Table 2. Women Participants' Response Regarding the Purpose of Participation
in the Functional Literacy Education Program

Items (N=141)	Frequency	Percentage (%)
Purpose of participating in the literacy program		
For my personal adaptation and development	102	72.3
For a happy home life	10	7.1
For the development of the community and the village	27	19.1
To increase the quality of work life	2	1.4
Others	0	0

4.3. Women Participants' Opinion Toward Satisfaction with the Functional Adult Literacy Education Program

To validate the reliability of the questions related to satisfaction of this education program, the researchers calculated Cronbach's (0.821) α based on standardized item as the reliability index which would validate the reliability of the question items presented at **Table 3**.

Table 3. Reliability Index of Participants' Opinions Toward Satisfaction with the Functional Literacy Education Program

Items	Frequency	Percentage (%)
Valid	141	100
Excluded	0	0
Total	141	100

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.726	0.821	16

N: number, %: percentage

Participants' opinions regarding their satisfaction with the literacy program are presented in **Table 4**. The provided data represents the results of a survey on a training course, where participants were asked to evaluate various aspects using a five-point Likert scale. The first set of responses pertains to the perceived usefulness of the training course objectives and contents for the participants' lives. The majority of respondents (46.1%) rated it as "High," indicating a positive perception, followed by 29.1% who considered it "Very High." Meanwhile, 23.4% rated it as "Moderate," and a minimal 1.40% rated it as "Low." This suggests a generally favorable view among participants regarding the relevance and utility of the training course in their lives. Next, participants were asked about the impact of the training course on their income. The majority (50.4%) indicated a "High" impact, followed by 19.9% who perceived a "Very High" impact, and 29.8% considered it to have a "Moderate" impact. This signifies a positive association between the training course and perceived income improvement among the majority of respondents. Lastly, participants were asked to assess whether the topics of the training course align with its objectives and purposes. The highest proportion (46.8%) perceived a "High" alignment, followed by 22.7% who considered it "Very High," 28.4% as "Moderate," and a small percentage (2.1%) as "Low." This suggests that a significant portion of participants sees a substantial

alignment between the course topics and its intended objectives (**Table 4**). Overall, these results indicate a generally positive perception among participants regarding the usefulness of the training course in their lives, its positive impact on income improvement, and the alignment of course topics with its objectives. These findings provide insights into the effectiveness and relevance of the training program from the participants' perspective.

Additionally, participants were asked to evaluate their satisfaction level for the facilities associated with an education place. Towards this, the majority of respondents (50.4%) rated the convenience of accessing the education venue as "High," followed by 36.9% who rated it as "Very High." Only a small proportion (1.4%) considered it "Low," and 11.3% rated it as "Moderate." This indicates a positive overall perception of the accessibility of the education place. Likewise, participants were asked to evaluate the quality of learning facilities and stationeries. Our results showed that a significant portion of respondents (44.7%) perceived the quality of learning facilities and stationeries as "High," followed by 36.2% who rated it as "Very High." Meanwhile, 19.1% considered it "Moderate." This suggests a generally positive perception of the quality of facilities and stationery provided in the classroom. The majority of respondents (54.6%) expressed "High" satisfaction with accommodations and learning environments,

followed by 27% who rated it as "Very High." Only a small percentage (1.4%) reported "Low" satisfaction, and 17% rated it as "Moderate." This indicates an overall positive satisfaction level with the provided accommodations and learning environments (**Table 4**). In summary, the survey results suggest that participants generally perceive the education place to be conveniently accessible, find the quality of learning facilities and stationeries satisfactory, and express high satisfaction with accommodations and learning environments. These findings provide valuable insights into the participants' perspectives on the facilities associated with the educational venue.

Next, participants were asked to evaluate their satisfaction level on trainers for functional educational literacy program. As presented in our results, the majority of respondents (65.2%) rated the trainers' preparation for lectures as "High," with an additional 22% rating it as "Very High." Only 12.8% considered it "Moderate." This indicates that a significant proportion of participants perceive the trainers to be well-prepared regarding content and format. Likewise, a substantial portion of respondents (62.4%) rated the qualification of trainers in terms of experience, knowledge, and teaching method as "High," with 28.4% rating it as "Very High." Only 9.2% considered it "Moderate." This suggests a positive perception of the trainers' qualifications. Additionally, the majority of respondents (51.8%) rated

communication with trainers and trainees as "High," while 32.6% rated it as "Very High." A small percentage (0.7%) reported "Low" communication levels, and 14.9% considered it "Moderate." This indicates a positive overall perception of communication within the training setting. A significant portion of respondents (61.7%) found the lectures interesting and easy to understand, with an additional 22.7% rating them as "Very High." Meanwhile, 15.6% considered them "Moderate." This suggests a positive reception of the lectures in terms of interest and clarity. Additionally, the majority of respondents (67.4%) felt that the lectures inspired them to develop critical thinking and creativity, with 8.5% rating it as "Very High." A smaller portion (24.1%) considered it "Moderate." This indicates a positive impact of the lectures on participants' cognitive development. Likewise, a significant majority of respondents (70.9%) reported that group discussions, skill-sharing, and experience-sharing activities were integrated into the lectures, with 14.2% rating it as "Very High." Only a small proportion (1.4%) considered it "Low," and 13.5% rated it as "Moderate." This indicates a positive perception of interactive elements within the training sessions (**Table 4**). In summary, the survey results suggest that participants generally have positive perceptions of trainers and their associated training sessions. The majority find the trainers well-prepared and qualified, appreciate effective communication, and perceive the lectures as interesting, inspiring critical thinking, and incorporating interactive

group activities. These findings provide valuable insights into the effectiveness of the training program and the trainers' impact on participants.

Lastly, participants' were asked to evaluate their satisfaction responses regarding their general overview of the training. Our data showed that a significant portion of respondents (44.7%) considered the training particularly helpful for their lives, with an additional 30.5% rating it as "Very High." About 24.8% rated it as "Moderate." This indicates a positive perception among participants regarding the training's utility in their personal lives. Next, the majority of respondents (46.1%) expressed high satisfaction with the entire training course, and an additional 19.1% rated their satisfaction as "Very High." About 33.3% considered their satisfaction to be "Moderate." This suggests an overall positive response to the training program. In line, a substantial majority of participants (70.2%) expressed a strong need for more similar training courses to improve their capacity. About 17% considered the need to be "High," and 12.8% rated it as "Moderate." This indicates a clear demand for additional training opportunities among the participants (**Table 4**). Overall these survey results demonstrate that participants generally find the training helpful for their lives, express satisfaction with the overall training course, and strongly feels the need for more similar training courses to enhance their capacity. These findings provide valuable insights into

the perceived effectiveness and demand for the training program from the participants' perspective.

Table 4. Women participants' opinions toward satisfaction with the functional literacy education program in rural settings of the Tikapur area, measured using the Likert scale.

S. No	Satisfaction response with the functional literacy education program (N=141)	Satisfaction response				
		Very Low N (%)	Low N (%)	Moderate N (%)	High N (%)	Very High N (%)
A. Training course						
1.	The objectives and contents of the training course are useful for my life	0 (0)	2 (1.40)	33 (23.4)	65 (46.1)	41 (29.1)
2.	The training course helps me improve income	0 (0)	0 (0)	42 (29.8)	71 (50.4)	28 (19.9)
3.	The topics of the training course are in line with the objectives and purposes of the training course	0 (0)	3 (2.1)	40 (28.4)	66 (46.8)	32 (22.7)
B. Facilities						
4.	The education place (venue) is convenient to access	0 (0)	2 (1.4)	16 (11.3)	71 (50.4)	52 (36.9)
5.	Quality of the learning facilities and	0 (0)	0 (0)	27 (19.1)	63 (44.7)	51 (36.2)

	stationeries for the classroom					
	Satisfaction of					
6.	accommodations/learn ing environments	0 (0)	2 (1.4)	24 (17)	77 (54.6)	38 (27)
C. Trainers (Teachers)						
	Trainers' preparation					
7.	for their lectures regarding content and format	0 (0)	0 (0)	18 (12.8)	92 (65.2)	31 (22)
	Qualification of					
8.	experience, knowledge, teaching method of trainers	0 (0)	0 (0)	13 (9.2)	88 (62.4)	40 (28.4)
9.	Communication with trainers and trainees	0 (0)	1 (0.7)	21 (14.9)	73 (51.8)	46 (32.6)
10.	The lectures are interesting and easy to understand	0 (0)	0 (0)	22 (15.6)	87 (61.7)	32 (22.7)
11.	The lectures inspire me to develop critical thinking and creativity to apply to my life	0 (0)	0 (0)	34 (24.1)	95 (67.4)	12 (8.5)
12.	Group discussion, skill and experience sharing activities are integrated into the lectures	0 (0)	2 (1.4)	19 (13.5)	100 (70.9)	20 (14.2)

D. General overview of training						
	This training course is					
13.	particularly helpful for my life	0 (0)	0 (0)	35 (24.8)	63 (44.7)	43 (30.5)
	My satisfaction with					
14.	the whole training course	0 (0)	2 (1.4)	47 (33.3)	65 (46.1)	27 (19.1)
	We really need more					
15.	similar training courses to improve our capacity	0 (0)	0 (0)	18 (12.8)	24 (17)	99 (70.2)

N: number; %: percentage

4.4. Women Participants' Responses to the Functional Literacy Education Program in Empowering Livelihood

Participants were asked various questions to determine the impact of the functional education program on empowering their day-to-day lives. Participants' responses are presented in **Table 5**.

The participants overwhelmingly perceive the overall effects of the education program as very effective (96.5%), indicating a positive impact of literacy program on their lives. Regarding future participation in similar type of education program, a significant majority express the intention to participate if circumstances permit (69.5%). Additionally, a vast majority recommend the education program to their neighbors (88.7%), affirming the positive community impact. Participants report substantial life changes after participating in the literacy program (91.5%). A considerable portion (52.5%) has initiated work relevant to income following their involvement. Almost unanimous agreement (99.3%) underscores the belief that the literacy program is helpful for community improvement and development. The vast majority (97.9%) confirm being able to read and write as a result of the program. When it comes to satisfaction with reading and writing skills, a substantial portion (41.8%) express very much satisfaction, while the majority (56%) report moderate satisfaction (**Table 5**).

Overall, the data reflects a highly positive perception of the education program's effectiveness and transformative impact on participants' lives and the community.

Table 5. Women's Participants' Responses to the Functional Education Literacy Program in Empowering Livelihood

Items (N=141)	Frequency	Percentage (%)
Overall effects of the education program		
Ineffective	3	2.1
Somewhat effective	2	1.4
Very effective	136	96.5
Future participation in the literacy program		
I will not	12	8.5
I will participate if circumstances permit	31	22
I will surely participate next time	98	69.5
Recommend program to neighbors in future		
Yes	125	88.7
No	16	11.3
Life changes after program		
No changes	12	8.5
Changes	129	91.5
Begin income-related work after program		
Yes	74	52.5

No	67	47.5
Literacy program aids community development		
Yes	140	99.3
No	1	0.7
Able to read and write after program		
Yes	138	97.9
No	3	2.1
Satisfaction with reading and writing skills after program		
Very much	59	41.8
Moderate	79	56
A little	3	2.1
Not at all	0	0
N: number; %: percentage		

4.5. Women Participants' Responses to the Functional Literacy Education Program Regarding Knowledge About Menstrual Hygiene

The majorities of participants have knowledge about menstrual hygiene (96.5%) and do not practice chhaupadi (85.8%), indicating a general awareness of menstrual health. Participants largely acknowledge the connection between poor menstrual hygiene and disease, with a significant proportion strongly agreeing (17.7%) and agreeing (68.8%). There is consensus on the importance of access to clean water and soap for cleaning genital areas (strongly agree: 26.2%, agree: 73%). Concerning preventive measures, a considerable number agree that washing hands before cleaning the genital area can prevent reproductive infections (strongly agree: 18.4% agree: 71.6%). The majority strongly agrees (39%) and agrees (57.4%) that using clean sanitary pads or reusable cloth is crucial for menstrual hygiene. When using reusable cloth, most participants wash it with soap and water (78.7%). In terms of disposal practices, a significant proportion disposes of menstrual materials in a bin (75.2%). Regarding the impact of the literacy program, a substantial number strongly agrees (29.1%), and the majority agrees (65.2%) that the program has helped improve their knowledge of menstrual hygiene. Overall, the results reflect a positive awareness and engagement with menstrual hygiene practices among the participants, with notable improvements attributed to the literacy program (**Table 6**). Hence, we

found that the functional literacy program had transformative learning effects on the participants, as they expressed how their life and thinking levels changed after participating in the program.

Table 6. Women's Participants' Response Regarding the Contributions of the Functional Education Literacy Program to Knowledge About Menstrual Hygiene

Items (N=141)	Frequency	Percentage (%)
Do you know about menstrual hygiene?		
Yes	136	96.5
No	5	3.5
Do you practice chhaupadi?		
Yes	20	14.2
No	121	85.8
Hygiene neglect during menstruation can cause illness		
Strongly agree	25	17.7
Agree	97	68.8
Disagree	19	13.5
Strongly disagree	0	0
Clean water and soap are essential for menstrual hygiene		
Strongly agree	37	26.2
Agree	103	73
Disagree	1	0.7
Strongly disagree	0	0
Handwashing before genital cleaning prevents reproductive infection		
Strongly agree	26	18.4
Agree	101	71.6

Disagree	8	5.7
Strongly disagree	6	4.3
Clean sanitary pad/reusable cloth are essential for menstrual hygiene		
Strongly agree	55	39
Agree	81	57.4
Disagree	5	3.5
Strongly disagree	0	0
What do you use to clean reusable cloth?		
With soap and water	111	78.7
Water only	30	21.3
How do you dispose menstrual materials?		
Open field	11	7.8
Latrine	24	17
Put it in the bin	106	75.2
Has participating in the literacy program improved your knowledge of menstrual hygiene?		
Strongly agree	41	29.1
Agree	92	65.2
Disagree	8	5.7
Strongly disagree	0	0
N: number; %: percentage		

4.6. Women Participants' Responses to the Functional Education Literacy Program Regarding Knowledge About Maternal and Child Health

Participants were asked several questions to discover the contribution of this literacy program in enhancing their knowledge about maternal health. The participants' responses are presented in **Table 7**.

Table 7. Women's Participants' Response Regarding the Contributions of the Functional Literacy Education Program to Knowledge About Maternal Health

Items (N=141)	Frequency	Percentage (%)
Do you know about the frequency of minimum antenatal care (ANC) visits?		
Yes	115	81.6
No	26	18.4
Do you know pregnancy risk symptoms?		
Yes	119	84.4
No	22	15.6
Do you know about taking supplement medicine (Iron, Zinc, and Folic acid tablets) during pregnancy?		
Yes	130	92.2
No	11	7.8
Do you know about eating balanced diets during and after pregnancy?		
Yes	136	96.5
No	5	3.5

Do you know about the suitable age for pregnancy?

Below 18 years	13	9.2
After 18 years	128	90.8

Do you know about child immunization?

Yes	108	76.6
No	33	23.4

Do you think the literacy program has helped you to improve your knowledge of maternal and child health?

Strongly agree	31	22
Agree	106	75.2
Disagree	4	2.8
Strongly disagree	0	0

Do you think hand washing is important before eating and after using toilets?

Strongly agree	75	53.2
Agree	66	46.8
Disagree	0	0
Strongly disagree	0	0

**Do you think the literacy program helps you
to improve your knowledge of health and
hygiene?**

Strongly agree	38	27
Agree	103	73
Disagree	0	0
Strongly disagree	0	0

N: number; %: percentage

The results indicate a generally positive awareness of maternal and child health among participants. A significant majority are aware of the recommended frequency of minimum antenatal care (ANC) visits (81.6%), risk symptoms during pregnancy (84.4%), and the importance of taking supplement medicine (92.2%), such as Iron, Zinc, and Folic acid tablets, during pregnancy. Awareness of maintaining a balanced diet during and after pregnancy is also high, with 96.5% responding affirmatively. Most participants are informed about the suitable age for pregnancy, with 90.8% recognizing it as after 18 years. Additionally, a majority are aware of child immunization (76.6%). Participants attribute improvements in knowledge of maternal and child health to the literacy program, with 22% strongly agreeing and 75.2% agreeing. The significance of hand washing before eating and after using toilets is acknowledged by a majority, with 53.2% strongly agreeing and 46.8% agreeing. Furthermore, participants see the literacy program as beneficial for enhancing their knowledge of health and hygiene, with 27% strongly agreeing and 73% agreeing. Overall, the findings suggest that the literacy program has positively impacted participants' awareness and understanding of maternal and child health, as well as broader health and hygiene practices.

Taken together, the results of our survey indicate that the majority of participants of this program are very satisfied with the literacy program in terms of their literacy skills, personal empowerment, and health awareness in connection to menstrual hygiene and maternal health.

4.7. Correlations (Spearman's rho) Between the Measures of Satisfaction Level of Functional Literacy Education Program Based on Training Course, Facilities, Trainers and General Overview of Training

The correlation indicates the Spearman's rank correlation coefficients between four parameters variables: Training Course (TC), Facilities (F), Trainers (T), and General Overview of Training (GOT). The table shows the strength and significance of the correlations (**Table 8**). All correlations are statistically significant at the 0.01 level, indicating that there are significant relationships between the pairs of variables. Our results suggest that as one variable increases, the other tends to increase as well, and vice versa. The strength of the correlations is considered moderate based on the magnitude of the coefficients. These findings suggest that enhancing one aspect of the training pro-gram may positively influence other related components, contributing to overall training effectiveness and participant satisfaction.

Table 8. Correlations (Spearman's rho) Between the Measures of Satisfaction Level of Functional Literacy Education Program Based on Training Course, Facilities, Trainers and General Overview of Training

			TC	F	T	GOT
Spearman's rho	TC	Correlation Coefficient	1.00	.402**	.428**	.456**
		Sig. (2-tailed)	.	.000	.000	.000
		N	141	141	141	141
	F	Correlation Coefficient	.402**	1.000	.327**	.302**
		Sig. (2-tailed)	.000	.	.000	.000
		N	141	141	141	141
	T	Correlation Coefficient	.428**	.327**	1.000	.290**
		Sig. (2-tailed)	.000	.000	.	.000
		N	141	141	141	141
	GOT	Correlation Coefficient	.456**	.302**	.290**	1.000
		Sig. (2-tailed)	.000	.000	.000	.
		N	141	141	141	141

** Correlation is significant at the 0.01 level (2-tailed). TC indicates Training Course, F indicates Facilities; T indicates Trainers, and GOT indicates General Overview of Training.

4.8. Association between Sociodemographic Variables and Satisfaction with Functional Literacy Program by Participants

Table 9 illustrates the association between demographic variables and participants' satisfaction with the literacy program. Significant associations were found between age groups ($p = 0.003$) and geographical areas ($p = 0.023$) with satisfaction levels. Participants aged 41-60 showed the highest satisfaction (60.9%), and those from Durgauli reported the highest satisfaction (58%). These findings suggest that age and geographical location may influence participants' perceptions of the program. However, no significant associations were observed based on caste or religion.

Table 9. Association Between Sociodemographic Variables and Satisfaction of Functional Literacy Program by Participants

Items	Very Low	Low	Moderate	High	Very High	Total	χ^2	P Value
	N (%)	N (%)	N (%)	N (%)	N (%)	N		
<hr/>								
Age (Yrs)								
20-40	0 (0)	0 (0)	4 (17.4)	14 (60.9)	5 (21.7)	23	19.806	0.003
41-60	0 (0)	0 (0)	31 (33.3)	40 (43)	22 (23.7)	93		
61-80	0 (0)	2 (8)	12 (48)	11 (44)	0 (0)	25		
<hr/>								
Caste								
Nepali	0 (0)	0 (0)	8 (21.1)	24 (63.2)	6 (15.8)	38	6.682	0.083
Tharu	0 (0)	2 (1.9)	39 (37.9)	41 (39.8)	21 (20.4)	103		
<hr/>								
Religion								
Hindu	0 (0)	2 (1.6)	44 (34.1)	56 (43.4)	27 (20.9)	129	5.347	0.148
Christian	0 (0)	0 (0)	3(25)	9 (75)	0 (0)	12		

Area								
Nuklipur	0 (0)	0 (0)	19 (40.4)	19 (40.4)	9 (19.1)	47	23.662	0.023
Bankatti	0 (0)	1 (16.7)	2 (33.3)	2 (33.3)	1 (16.7)	6		
Chamelipur	0 (0)	0 (0)	12 (41.4)	11(37.9)	6 (20.7)	29		
Durgauli	0 (0)	0 (0)	11 (22)	29 (58)	10 (20)	50		
Laikpur	0 (0)	1 (11.1)	3 (33.3)	4 (44.4)	1 (11.1)	9		

N: number; %: percentage; χ^2 : chi-square

V. DISCUSSION

The current study explores the satisfaction levels and experiences of underprivileged mothers residing in rural villages in the Kailali district, while also assessing the impact of a functional education literacy program on their lives. Furthermore, it examines participants' perceptions of the program's effectiveness, including aspects such as training course content, facilities, trainers, and overall training experience. Additionally, the study explores participants' menstrual hygiene practices, knowledge, awareness, and understanding, as well as maternal health-related factors influenced by the program.

The empowerment of rural women is one of the most important initiatives in recent days. Education empowers and assists women in gaining self-worth, overcoming their shortcomings, and enables them to challenge entrenched harmful traditions that contradict principles of fairness and justice [65]. A previous study conducted by Mtika and colleagues emphasized that adult literacy programs not only enhance individuals' practical skills but also empower them to lead more fulfilling lives [66]. Similarly, Rehman concluded that engagement in adult literacy programs not only cultivates emotional and psychological control in

learners but also nurtures compassionate attitudes, enhances day-to-day learning, and fosters community participation [67]. The results of the study revealed that participants who participated in the functional education literacy program showed high satisfaction response, citing its suitability and usefulness in meeting their needs. This indicates that the objectives and content of the program resonated well with the participants, addressing their specific challenges and aspirations. Moreover, participants reported tangible benefits from the program, particularly in terms of improving their income-generating activities. This suggests that the literacy skills obtained from the program enabled them to explore new opportunities or enhance existing livelihood strategies, contributing to their economic empowerment. Furthermore, participants expressed satisfaction with the learning facilities and environments provided. Access to conducive learning spaces and re-sources is crucial for effective learning outcomes, and the positive satisfaction response in this regard reflects the program's commitment to ensuring a supportive educational environment. Additionally, participants found the lecture contents of the education program to be both interesting and easily understandable. This indicates that the program effectively delivered educational content in a manner that engaged participants and facilitated comprehension, thereby maximizing learning outcomes. Beyond skill acquisition, participants highlighted the program's role in fostering critical thinking and creativity. This aspect is

significant as it indicates that the program not only imparted knowledge but also empowered participants to apply their learning in innovative ways to address challenges and pursue opportunities in their daily lives. This positive feedback from participants underscores the effectiveness of the functional literacy program in empowering underprivileged rural mothers. By addressing their educational needs, enhancing livelihood opportunities, and nurturing critical thinking and creativity, the program has made significant strides in improving the lives of its participants and fostering sustainable development in rural communities. Several studies have shown that participatory learning models in functional literacy education programs effectively improve learning motivation, attitudes, and achievements [13,68]. Additionally, research indicates that participatory-based functional literacy education programs positively impact learning effectiveness, measured through the achievement of objectives, participants' engagement, knowledge acquisition, attitude improvements, and skill enhancement [1,13]. In addition, the participants expressed satisfaction with the positive outcomes of the program on their livelihoods and personal empowerment. Many reported acquiring basic literacy skills, such as reading and writing, which significantly boosted their confidence. They noted that the program facilitated positive changes in various aspects of their lives and contributed to the improvement and development of their communities. Moreover, they expressed willingness to

participate in similar programs in the future and were keen to recommend them to their neighbors. These findings align with the existing literature, underscoring the transformative role of functional literacy education in empowering women and enabling them to play more active roles in social welfare activities for societal advancement [9].

In many parts of Nepal, menstrual behaviors are influenced by socio-cultural restrictions and taboos, hindering menstrual hygiene management (MHM) [69,70]. This inhibition, stemming from cultural taboos and misconceptions, particularly affects women's self-respect, health, and education [71]. Studies have highlighted the risk of infections due to inadequate menstrual hygiene practices, leading to various health issues such as reproductive tract infections, genitourinary tract infections, and cervical cancer. Further-more, societal taboos and misconceptions surrounding menstruation perpetuate gender inequality and hinder women's empowerment, compounded by a lack of information and guidance on menstruation management from teachers [26, 69]. In many parts of the Sudurpaschim province, including our study area, the practice of chhaupadi persists [26]. Research indicates a significant association between menstrual hygiene practices and mothers' educational status, with mothers who are literate positively influencing their daughters' MHM practices through prior orientation

[72,73]. In our study, participants emphasized crucial hygiene practices, such as handwashing and proper disposal methods, indicating the literacy program's success in enhancing health education and awareness. Participating in such programs likely has several positive social impacts. The increased knowledge and awareness of menstrual hygiene practices among participants suggest potential improvements in their overall health and well-being. Additionally, the reported decrease in the practice of chhaupadi in our study, although not directly assessed for causality, indicates a positive shift away from harmful cultural practices. Additionally, participants demonstrated excellent knowledge of hygiene practices, menstrual hygiene management, and waste management. Therefore, our findings emphasize the significance of functional education programs in the Sudurpaschim province for enhancing menstrual hygiene practices, illustrating their potential to empower women by fostering knowledge and positive behaviors in their day to day life and for societal changes. However, further in-depth education initiatives and broader societal interventions are necessary to tackle such complex issues effectively.

Furthermore, the program's focus on maternal and child health education which may have contributed to increased knowledge and awareness among participants, potentially leading to better health outcomes for themselves and their families.

Specifically, participants showed increased knowledge regarding the frequency of antenatal care checkups, identification of pregnancy risk symptoms, and the importance of prenatal supplement intake, such as iron, zinc, and folic acid. Additionally, they demonstrated improved awareness of maintaining a balanced diet during and after pregnancy, understanding the appropriate age for marriage, the significance of child immunization, and the importance of hygiene practices. Overall, these findings underscore the program's potential to foster positive social change by empowering participants with knowledge and skills that can enhance their lives and contribute to the well-being of their communities. Of these, one of the studies reported that participatory women's literacy groups were found to be effective in improving maternal and child health outcomes, along with other benefits such as increased knowledge and empowerment of family members [74]. Education programs like this can serve as effective tools in improving maternal and child health knowledge among underprivileged rural women, potentially contributing to reducing maternal and neonatal mortality rates in Nepal.

While our study offers valuable insights into the impact of functional literacy education on the lives of underprivileged women in the Sudurpaschim province, it is important to acknowledge several limitations. Firstly, the nine-year gap between the literacy program's implementation and the administration of the

questionnaire to assess the satisfaction of participants participating in a functional literacy education program poses a limitation on the accuracy and relevance of their responses. Despite this, our study under-scores the transformative power of literacy programs in enhancing education, health knowledge, and empowerment among underprivileged rural women in Nepal. The remarkably positive feedback from participants demonstrates the lasting impact of these programs, providing crucial insights for policymakers, NGOs, and community organizations. This highlights the need for ongoing and timely evaluations to maximize the benefits of such initiatives in the community. Addressing this gap in future research can build on our findings to advocate for the broader implementation of literacy programs, ultimately contributing to sustainable development and the empowerment of marginalized communities in Nepal, especially in rural settings. However, we recognize the necessity for further education initiatives and broader societal interventions to address complex issues like chhaupadi. Moreover, our study serves as a step towards empowering women and promoting functional literacy education that integrates health topics such as menstrual and maternal health in Nepal. Additionally, the small sample size and convenience sampling technique used in our study may limit the generalizability of our findings and introduce potential bias, as participants were selected based on availability from five small villages near the Tikapur region. Our reliance on self-reported data may introduce

social desirability bias, potentially leading to inaccuracies in the data. The absence of a control group limits our ability to compare outcomes and ascertain the specific effects of the functional literacy program. Lastly, the cross-sectional nature of our study design restricts our ability to establish causal relationships between variables. Future research should employ larger, randomized samples, incorporate objective measures to validate self-reported data, include control groups to strengthen causal inferences, and utilize longitudinal designs to explore the long-term impacts of literacy interventions on women's empowerment and well-being.

VI. CONCLUSION

In conclusion, our study underscores the significant impact of functional literacy pro-grams on the lives of underprivileged women in rural areas, particularly in Kailali district. Through participation in these programs, women exhibited enhanced knowledge and awareness across various domains, including general literacy skills, menstrual hygiene practices, and maternal and child health. The findings indicate a positive connection between program participation and improvements in participants' understanding of key health topics, such as antenatal care, pregnancy risk symptoms, and nutrition during pregnancy. Moreover, the program's emphasis on literacy and life skills has empowered women to make informed decisions and pursue opportunities for personal and economic development. Furthermore, our study highlights the importance of educational interventions in addressing the unique needs of marginalized communities in remote settings, offering a pathway to break the cycle of poverty and promote social inclusion and sustainable development. We believe that our findings serve as a valuable contribution to empowering women and promoting

menstrual and maternal health in Nepal, contributing to a growing database of knowledge in this field.

However, there is a need for continued investment in functional literacy programs and similar community-based interventions to support the empowerment of women and marginalized groups. By addressing educational disparities and promoting health literacy, these initiatives can contribute to the achievement of broader development goals and create lasting positive change in rural communities. Ultimately, our study reaffirms the importance of education as a catalyst for empowerment and social transformation, emphasizing the critical role of functional literacy programs in promoting equity, dignity, and well-being for all.

VII. REFERENCES

1. Addae, D. Adults who learn: Evaluating the social impact of an adult literacy project in rural South Africa. *Soc. Sci. Humanit. Open.* **2021**, 3, 100115.
2. Berkman, N.D.; Davis, T.C.; McCormack, L. Health literacy: what is it? *J. Health Commun.* **2010**, 15, 9-19.
3. Nutbeam, D.; Muscat, D.M. Health promotion glossary 2021. *Health Promot. Int.* **2021**, 36, 1578-1598.
4. Ebrahimi, R.; Choobchian, S.; Farhadian, H.; Goli, I.; Farmandeh, E.; Azadi, H. Investigating the effect of vocational education and training on rural women's empowerment. *Humanit. Soc. Sci. Commun.* **2022**, 9, 1-11.
5. Dugarova. E.; Gülasan. N. Challenges and Opportunities in the Implementation of the Sustainable Development Goals. United Nations Development Programme and United Nations Research Institute for Social Development, New York, NY 10017 USA, 8 February 2017. <https://www.truevaluemetrics.org/DBpdfs/UN/Global-Trends-UNDP-UNRISD-Report-2017.pdf>
6. Das, S.; Loba, F.; Mozumder, K.; Roy, P.; Das, J.; Das, S.K. Trend of maternal education in Bangladesh from 2004–2018: Analysis of demographic

- surveillance data. *Plos one*. **2022**, *17*, e0255845.
7. Carneiro, P.; Meghir, C.; Parey, M. Maternal education, home environments, and the development of children and adolescents. *J. Eur. Econ. Assoc.* **2013**, *11*, 123-160.
 8. Melnic, A.-S.; Botez, N. Formal, non-formal and informal interdependence in education. *Econ. Transdisciplin. Cogn.* **2014**, *17*, 113-118.
 9. Farooqi, R.; Khan, M.I.; Ahmad, W.; Ullah, Z.; Imran, S. Role of Functional Literacy and its Impact on Women's Empowerment. *J. Soc. Sci. Rev.* **2023**, *3*, 922-929.
 10. Nkansah, T. The role of adult literacy in community development in Ghana: Perceptions and experiences of two rural communities. *Int. J. Community Soc. Dev.* **2022**, *4*, 272-293.
 11. Tiruaynet, K. Determinant Factors of Women's Participation in Functional Adult Literacy Programme in Bahir Dar Zuria Woreda, North West Ethiopia. *Open Access Lib. J.* **2015**, *2*, 1-6.
 12. Ulrike, H.; Cassandra.S. *Narrowing the Gender Gap: Empowering Women through Literacy Programmes: Case Studies from the UNESCO Effective Literacy and Numeracy Practices Database (LitBase)*; UNESCO Institute for Lifelong Learning: Feldbrunnenstraße 58, 20148 Hamburg, Germany, 2015; pp1-115.

13. Arbarini, M.; Jutmini, S.; Djoyoatmojo, S.; Sutarno, S. Implementation of Functional Literacy Education by Participatory Learning as Effort of Lifelong Learning. In Proceedings the 2nd International Conference on Teacher Training and Education, Sebelas Maret University, Indonesia, 2015; pp. 734-745.
14. Feinstein, L.; Hammond, C. The Contribution of Adult Learning to Health and Social Capital. *Oxf. Rev. Educ.* **2004**, *30*, 199-221.
15. Mengistie, T.A. Now I Feel as a Full Person: Women's Empowerment through Integrated Functional Adult Education Program in Ethiopia. *J. Lang. Lit. Educ.* **2021**, *17*, 1-23.
16. Liu, C.; Wang, D.; Liu, C.; Jiang, J.; Wang, X.; Chen, H.; Ju, X.; Zhang, X. What is the meaning of health literacy? A systematic review and qualitative synthesis. *Fam. Med. Community Health.* **2020**, *8*, e000351 .
17. Hammond, C.; Feinstein, L. The effects of adult learning on self-efficacy. *London review of education* **2005**, *3*, 265-287.
18. Strecher, V.J.; McEvoy DeVellis, B.; Becker, M.H.; Rosenstock, I.M. The role of self-efficacy in achieving health behavior change. *Health. Educ. Q.* **1986**, *13*, 73-92.
19. Kickbush, I.S. Health literacy: addressing the health and education divide. *Health. Promot. Int.* **2001**, *16*, 289-297.

20. Geleta, T.O.; Hirpa, D.A. Beliefs of adults with disabilities about literacy skills' roles on their livelihood as well as quality of life and their influence on becoming literate in Ethiopia. *Cogent. Education*. **2023**, *10*, 2201167.
21. Gautam, S. Situational Analysis of Women Empowerment and Gender Equality. *NUTA Journal*. **2021**, *8*, 124-134.
22. Dahal, P.; Joshi, S.K.; Swahnberg, K. A qualitative study on gender inequality and gender-based violence in Nepal. *BMC public health*. **2022**, *22*, 1-15.
23. Deagon, J.R.; Ham, M.; Hillman, W. Complex factors and educational tools for social change and empowerment for severely marginalized Nepalese women working in hospitality and tourism. *Empir. Res. Vocat. Educ. Train*. **2021**, *13*, 1-23.
24. Dhimal, S. Old Women Care Situation in Rural Nepal: A Reflection from Professional Perspective. Master Thesis, Nord University, Norway, 2019.
25. Amatya, P.; Ghimire, S.; Callahan, K.E.; Baral, B.K.; Poudel, K.C. Practice and lived experience of menstrual exiles (Chhaupadi) among adolescent girls in far-western Nepal. *PloS one* **2018**, *13*, e0208260.
26. Ranabhat, C.; Kim, C.-B.; Choi, E.H.; Aryal, A.; Park, M.B.; Doh, Y.A. Chhaupadi culture and reproductive health of women in Nepal. *Asia. Pac. J. Public Health*. **2015**, *27*, 785-795.
27. Ali, S.; Thind, A.; Stranges, S.; Campbell, M.K.; Sharma, I. Investigating

- Health Inequality Using Trend, Decomposition and Spatial Analyses: A Study of Maternal Health Service Use in Nepal. *Int. J. Public Health*. **2023**, 68, 1605457.
28. Gautam, L.; Subedi, J. Barriers in utilization of maternal and child health services among Musahar in Dudhauri Municipality of Sindhuli district, Nepal. *Int. J. Community. Med. Public Health*. **2021**, 8, 1-8.
29. Sumankuuro, J.; Crockett, J.; Wang, S. Perceived barriers to maternal and newborn health services delivery: a qualitative study of health workers and community members in low and middle-income settings. *BMJ open*. **2018**, 8, e021223.
30. Awasthi, M.S.; Awasthi, K.R.; Thapa, H.S.; Saud, B.; Pradhan, S.; Khatry, R.A. Utilization of antenatal care services in Dalit communities in Gorkha, Nepal: a cross-sectional study. *J. Pregnancy*. **2018**, 2018, 1-8.
31. Pandey, J.P.; Dhakal, M.R.; Sujun Karki, S.K.; Pradeep Poudel, P.P.; Pradhan, M.S. Maternal and child health in Nepal: the effects of caste, ethnicity, and regional identity: further analysis of the 2011 Nepal demographic and health survey. Nepal Ministry of Health and Population, New ERA, and ICF International: Calverton, Maryland, USA, 2013; pp.1-58.
32. Simkhada, B.; van Teijlingen, E.; Porter, M.; Simkhada, P. Major problems and key issues in Maternal Health in Nepal. *Kathmandu. Univ. Med. J*. **2006**,

- 4, 258-263.
33. Matsumura, M.; Gubhaju, B. Women's status, household structure and the utilization of maternal. *Asia Pacific Popul. J.* **2001**, *16*, 23-44.
 34. Khatri, R.B.; Durham, J.; Karkee, R.; Assefa, Y. High coverage but low quality of maternal and newborn health services in the coverage cascade: who is benefitted and left behind in accessing better quality health services in Nepal? *Reproductive Health* **2022**, *19*, 1-20.
 35. Sywelem, M.M.G. Literacy and adult education in Egypt: achievements and challenges. *Am. J. Educ. Res.* **2015**, *3*, 793-799.
 36. Isa, A. Exploring the efficacy of functional literacy in adult literacy centres in Kano state, Nigeria. *ATBU J. Sci. Technol. Educ.* **2019**, *7*, 91-98.
 37. Pokharel, T. Poverty in Nepal: Characteristics and challenges. *Journal of Poverty, Investment and Development.* **2015**, *11*, 44-55.
 38. Nepali, P.B.; Pyakuryal, K.N. Livelihood Options for Landless and Marginalised Communities in an Agrarian Society: A Case Study from Far Western Nepal'. *Pak. J. Agri. Sci.* **2011**, *48*, 1-10.
 39. Shahi. H.B. Scenario of Poverty in Federal Nepal. *Int. J. Res. Educ. Humanit. Commerce.* **2023**, *4*, 147-164.
 40. Hamal, M.; Heiter, K.; Schoenmakers, L.; Smid, M.; De Cock Buning, T.; De Brouwere, V.; Bardají, A.; Nepal, C.; Dieleman, M. Social accountability in

- maternal health services in the far-western development region in Nepal: an exploratory study. *Int. J. Health Policy Manag.* **2019**, 8, 280-291.
41. Adhikari, L.; Shrestha, A.J.; Dorji, T.; Lemke, E.; Subedee, B.R. Transforming the lives of mountain women through the Himalayan nettle value chain: a case study from Darchula, far west Nepal. *Mt. Res. Dev.* **2018**, 38, 4-13.
 42. Shrestha, G.; Pakhtigian, E.L.; Jeuland, M. Women who do not migrate: Intersectionality, social relations, and participation in Western Nepal. *World Development* **2023**, 161, 106109.
 43. Chao, F.; Kc, S.; Ombao, H. Estimation and probabilistic projection of levels and trends in the sex ratio at birth in seven provinces of Nepal from 1980 to 2050: a Bayesian modeling approach. *BMC Public Health.* **2022**, 22, 358.
 44. Rogers. A history of communication study. A biographical approach. New York: Free Press, 1996.
 45. EFA. Education for All. Global Monitoring Report, 2006.
 46. World Bank. Empowerment and Poverty Reduction. World Bank A Sourcebook, 2002.
 47. UNICEF. Measuring Women's Empowerment as a Variable in International Development Background. Paper Prepared for the World Bank Workshop on Poverty and Gender: New Perspectives, 1999.

48. Porras-Hernández, L. H.; Salinas-Amescua B. Nonparticipation in adult education from self-perceptions to alternative explanations. *Adult Educ. Quart.* **2012**, 62, 311-331.
49. UNESCO. Understandings of literacy, 2006b. Retrieved from http://www.unesco.org/education/GMR2006/full/chapt6_eng.pdf.
50. Hasaba, S. Education for all: Reflecting on adult literacy learning for socio-economic development in Uganda. *Acad. Res. Int.* **2012**, 2, 205-216.
51. Wickens C. M.; Sandlin J. A. Literacy for what? Literacy for whom? The politics of literacy education and neocolonialism in UNESCO- and World Bank-sponsored literacy programs. *Adult Educ. Quart.* **2007**, 57, 275-292.
52. Niraula A. Rethinking the role of literacy programs in women's empowerment (Master's thesis), University of Bergen, Norway, 2011.
53. Rogers A. Report of consultancy on Functional Adult Literacy Programme in Kalangala and Buvuma Islands provided by the Government of Uganda Ministry of Gender, Labour and Social Development and Supported by ICEIDA, 2008. Retrieved from http://www.iceida.is/media/pdf/UGANDA_REPORT.PDF.
54. UNESCO. Youth and skills: Putting education to work, 2012. Retrieved from <http://unesdoc.unesco.org/images/0021/002180/218003e.pdf>
55. Chaturvedi A.; Chiu C.-y.; Viswanathan M. Literacy, negotiable fate, and

- thinking style among low income women in India. *J. Cross. Cult. Psychol.* **2009**, 40, 880-893.
56. Prins E.; Toso B. W.; Schafft K. A. “It feels like a little family to me”: Social interaction and support among women in adult education and family literacy. *Adult Educ. Quart.* **2009**, 59, 335-352.
57. Takayanagi T. Rethinking literacy: A case study exploring women’s informal learning in coastal Kenya. *CICE Series*. 2013, 5(1), 51-63.
58. Freire P.; Macedo D. *Literacy: Reading the word and the world*. London, England: Routledge, 1987.
59. Akello, J. A.; Musiimenta, P. Functional Adult Literacy: The Influence on Women’s Improved Health Promotion Behaviours in Apac District, Northern-Uganda. *Int.J. Res. Humanit. Soc. Sci.* **2021**, 11, 59-72.
60. Chitrakar, R. *Nepal: non-formal education*, 2007.
61. Robinson-Pant, A. Changing discourses: Literacy and development in Nepal. *Int. J. Educ. Dev.* **2010**, 30, 136-144.
62. Statistics, C.B.o. *Preliminary Report of National Population 2021*. 2021.
63. Kugbey, N.; Meyer-Weitz, A.; Asante, K.O. Access to health information, health literacy and health-related quality of life among women living with breast cancer: Depression and anxiety as mediators. *Patient. Educ. Couns.* **2019**, 102, 1357-1363.

64. Andrade, C. The inconvenient truth about convenience and purposive samples. *Indian J. Psychol. Med.* **2021**, *43*, 86-88.
65. Baig, I.A.; Batool, Z.; Ali, A.; Baig, S.A.; Hashim, M.; Zia-ur-Rehman, M. Impact of women empowerment on rural development in Southern Punjab, Pakistan. *Quality & Quantity* **2018**, *52*, 1861-1872.
66. Mtika, P.; Abbott, P. Literacy and quality of life: a study of adults with poor literacy capabilities in western Rwanda. *Compare: J. Int. Comp. Educ.* **2023**, 1-17.
67. Rehman, A.U. Impacts of adult literacy on women lives in district kech. *J. Res. & Reflections. Edu.* **2008**, *2*, 145-156.
68. Duze, C.O. Effects of participatory learning technique on achievement and attitude of b. Ed. Students in educational research methods. *J. Soc. Sci.* **2010**, *22*, 185-189.
69. Bhusal, C.K. Practice of menstrual hygiene and associated factors among adolescent school girls in Dang district, Nepal. *Adv. Prev. Med.* **2020**, 2020.
70. Sumpter, C.; Torondel, B. A systematic review of the health and social effects of menstrual hygiene management. *PloS one* **2013**, *8*, e62004.

71. Yadav, R.N.; Joshi, S.; Poudel, R.; Pandeya, P. Knowledge, attitude, and practice on menstrual hygiene management among school adolescents. *J. Nepal Health. Res. Counc.* **2018**, *15*, 212-216.
72. Hussein, J.; Gobena, T.; Gashaw, T. The practice of menstrual hygiene management and associated factors among secondary school girls in eastern Ethiopia: The need for water, sanitation, and hygiene support. *Women's Health* **2022**, *18*, 17455057221087871.
73. Khanal, P. Knowledge and practice of menstrual hygiene among adolescent school girls in Tanahun District. *Patan Pragya* **2019**, *5*, 103-112.
74. Manandhar, S.; Adhikari, R.P.; Acharya, A.; Pollifrone, M.M.; Nepali, L.B.; Darji, P.; Dangal, N.R.; Rana, P.P.; Cunningham, K. Health mothers' groups in Nepal: barriers, facilitators, and recommendations. *Current Developments in Nutrition* **2022**, *6*, nzac039.

VIII. PUBLICATION LIST

1. **Na, J.S.**; Bajgai, J.; Sharma, S.; Dhakal, S.; Ahn, D.W.; Doh, Y.-A.; Kim, Y.; Lee, K.-J. Enhancing Health and Empowerment: Assessing the Satisfaction of Underprivileged Rural Women Participating in a Functional Literacy Education Program in Kailali District, Nepal. *Healthcare* **2024**, 12, 1099. <https://doi.org/10.3390/healthcare12111099>.

IX. ANNEX

INFORMED CONSENT FORM

PARTICIPANT SATISFACTION SURVEY

(For 18 Years and Above Adults)

Study Research Title: Impact of Functional Literacy Education Program
on the Livelihoods of Underprivileged Women in Rural Tikapur, Nepal

Brief Description About this Research Study: Illiteracy relic as a global issue especially in developing nation such as Nepal. Towards this, functional literacy education programs are considered as a potentially imperative tool to improve the reading, writing, numeracy, and basic vocational skills to support the livelihood of poor and needy citizens. Still large numbers of rural women globally are deprived from basic education and remain illiterate. Nonetheless, the impact of these programs on the

livelihood of the underprivileged rural women is poorly studied and documented.

Objective: The objective of this research study is to evaluate the impact of functional literacy education program on the livelihoods of underprivileged rural women in Tikapur region of Nepal.

Participants: About 150 quantitative interviews of participants who are readily available and willing to take part in the survey within 5 km periphery from Tikapur region from five villages named Nuklipur, Bankatti, Chamelipur, Durgauli and Laikpur area where literacy education centers were opened before and take participation in education program will be conducted.

About Participation in the Study: Please read the consent form carefully. If you are unable to read, you can ask your friend, relative or whomever you trust, to read it for you. This form contains important information related to participation in this study. The person that has approached you

will explain about the research. It is solely your right to decide whether or not to participate in this research. If you agree to participate in this research, we request you to sign the form. One copy of the signed consent form will be given to you.

Participation is Voluntary: It is your choice whether or not to participate in this survey. If you choose to participate, you may change your mind and leave the study at any time. We assure you that if you refuse participate or if you discontinue your participation, there will not be any penalties or loss in your benefits to which you are otherwise entitled now or in future. Whatever you decide it will not be held against you. Feel free to ask any question you want before you decide.

Interview Duration: If you agree to participate, we will take your interview only once. The interview will take less than 30 minutes. We will arrange place and time that would be suitable for you. We will ask you some questions related to your experience regarding the functional literacy

education program that you participated before. If you do not want to answer any question that you have been asked for any reason, then you can skip to another question.

No Direct Benefits from being in this Research Study: There are no any direct benefits to you from your taking participation in this research. However, we believe that this study will be useful for the establishment of a database for the designing similar programs in Nepal for the betterment of rural underprivileged women.

No Risks and Discomforts: There is no any risk or discomfort that may result from taking part in this study or answering the study questions. If you do not feel comfortable to answer any question, we can skip that part.

No Financial Incentive: You neither need to pay for your participation nor receive any financial incentive for participating in this study.

Privacy is Protected: We are collecting your name and contact information for the research purpose to contact you if we need additional

information from you in future. We will conduct interviews in a private place as per your convenience. Your responses will be kept confidential. We will not share any of your personal information or identity. We will not use your name or information that would identify you in any publications or presentations.

STATEMENT OF CONSENT

I have read/understood from my 's reading about the information in this consent form including risks and possible benefits. All my questions about the research have been answered to my satisfaction. I understand that I am free to withdraw at any time without any penalty or loss of benefits to which I am otherwise entitled. If I have any question later or I feel some stress or problem through this research then I can contact to the information provided in this form. I will get a copy of this form.

Therefore, I give my consent to participate in this study.

.....
Name of the Participant	Signature of the Participant	Date
.....
Name of the Enumerator	Signature of Enumerator	Date

FEEDBACK FORM

Age: **Sex:** **Ethnicity:** **Religion:**
Educational level:
Village name:
Year of education (from 2013 - 2022):

Please give your opinion on the following contents for better courses in the future. Please circle the level that you think is appropriate (from low to high). Circle only one level and leave no content blank.

No.	Details	Satisfaction rate (1 - 5) From low to high				
A. Training course		Low ↔ High				
1	The objectives and contents of the training course are useful for my life	1	2	3	4	5
2	The training course helps me improve income	1	2	3	4	5
3	The topics of the training course are in line with the objectives and purposes of the training course	1	2	3	4	5
B. Facilities		Low ↔ High				
4	The education place(venue) is convenient to access	1	2	3	4	5
5	Quality of the learning facilities and stationeries for the classroom	1	2	3	4	5
6	Satisfaction of accommodations/learning environments	1	2	3	4	5
C. Trainers (Lecturers)		Low ↔ High				
7	Trainers' preparation for their lectures regarding content and format	1	2	3	4	5

No.	Details	Satisfaction rate (1 - 5) From low to high				
A. Training course		Low ↔ High				
8	Qualification of experience, knowledge, teaching method of trainers	1	2	3	4	5
9	Communication with trainers and trainees	1	2	3	4	5
10	The lectures are interesting and easy to understand	1	2	3	4	5
11	The lectures inspire me to develop critical thinking and creativity to apply to work	1	2	3	4	5
12	Group discussion, skill and experience sharing activities are integrated into the lectures	1	2	3	4	5
D. Overview		Low ↔ High				
13	This training course is particularly helpful for my profession.	1	2	3	4	5
14	My satisfaction with the whole training course	1	2	3	4	5
15	We really need more similar training courses to improve professional capacity	1	2	3	4	5

1. Motive and purpose of participation in education program

1.1.How do you come to know about this education program?

1. I participated by recommendation of an acquaintance
2. I participated for myself
3. Others (.....)

1.2.What was your major purpose to get this education?

1. For my personal adaptation and development
2. For the happy home life
3. For development of the community and the village
4. To increase quality of work life
5. Others (.....)

2. Evaluation/awareness on the educational effect

2.1.How do you think of the overall effects of this education?

1. The education is ineffective
If yes then please mention reason
(.....)
2. The education is somewhat effective
If yes then please mention reason
(.....)
3. The education has great effect

If yes then please mention reason

(.....)

2.2. Will you participate in the education program when you have opportunity next time?

1. I will not
2. I will participate if circumstances permit
3. I will surely participate next time
4. Others (.....)

2.3. Will you recommend the education program to your neighbors next time?

1. Yes
2. No

2.4. Did you have any changes in your life after the education?

1. I did not have any changes

If yes then please mention reason

(.....)

2. I had some changes

If yes then please mention reason

(.....)

2.5. Did you newly begin any work relevant to the income after the education program?

1. Yes
2. No

If your answer yes in the above question, what kind of work did you start working?

(.....)

2.6. Are there new works regardless of income after the education program?

1. Yes
2. No

If your answer yes in the above question, what kind of work it is?

(.....)

2.7. What kind of job do you want to get in the future, if possible to get?

(.....)

2.8. Do you think that this education program will help in the improvement and development of the community?

1. Yes
2. No

2.9. Can you read and write after this education program?

1. Yes
2. No

2.10. How long did you participate in this education program?

.....

2.11. How satisfied are you with your reading and writing ability after participated in this education program?

1. Very much
2. Moderate
3. A little
4. Not at all

3. Effect of Education Program on Health Perception and Hygiene

3.1.Do you have knowledge about menstrual hygiene?

1. Yes
2. No

3.2.Do you practice chhaupadi?

1. Yes
2. No

3.3.Do not take care of hygiene during menstruation can cause disease

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree

3.4.Access to clean water and used of soap for cleaning genital are important to keep genital in clean condition during menstruation

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree

3.5.Washing hand before cleaning genital area can prevent reproductive infection

1. Strongly agree
2. Agree
3. Disagree

4. Strongly disagree

3.6.Menstruation occurs because of disease

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree

3.7.Using clean sanitary pad/reusable cloth is very important for mensural hygiene

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree

3.8.What do you use to wash reusable cloth?

1. With soap and water
2. With water only

3.9.How do you dispose of menstrual materials?

1. Open field
2. Latrine
3. Put in the bin

3.10. Do you think this education program help you to improve your knowledge on menstrual hygiene?

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree

3.11. Do you have knowledge of the frequency of minimum visits of ANC?

1. Yes
 2. No
- 3.12. Knowledge of risky symptoms during pregnancy**
1. Yes
 2. No
- 3.13. Knowledge on supplement medicines (Iron, Zinc, Folic Acid, etc.) during pregnancy**
1. Yes
 2. No
- 3.14. Knowledge on eating balance diet during and after pregnancy**
1. Yes
 2. No
- 3.15. Knowledge on immunization**
1. Yes
 2. No
- 3.16. Knowledge of suitable age for pregnancy**
1. Below 18 years
 2. After 18 years
- 3.17. Do you think this education program help you to improve your knowledge on maternal health?**
1. Strongly agree
 2. Agree
 3. Disagree
 4. Strongly disagree
- 3.18. Do you think hand washing is important before eating and after using toilets?**

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree

3.19. Do you think education program help to improve your knowledge on the health perception and hygiene?

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree

Thank you very much for your feedback!

सूचित सहमति फारम

सहभागी सन्तुष्टि सर्वेक्षण

(18 वर्ष र माथिका वयस्कहरूको लागि)

अध्ययन अनुसन्धान शीर्षक: टीकापुर नेपालका पिछडिएका ग्रामीण महिलाहरूको जीविकोपार्जनमा कार्यात्मक साक्षरता शिक्षा कार्यक्रमको प्रभाव

यस अनुसन्धान अध्ययनको बाख्खा संक्षिप्त विवरण: विशेषगरी नेपाल जस्ता विकासोन्मुख राष्ट्रहरूमा निरक्षरता विश्वव्यापी समस्याको रूपमा रहेको छ। यसतर्फ, कार्यात्मक साक्षरता शिक्षा कार्यक्रमहरूलाई गरिब र खाँचोमा परेका नागरिकहरूको जीविकोपार्जनलाई समर्थन गर्न पठन, लेखन, संख्या र आधारभूत व्यावसायिक सीपहरू सुधार गर्न सम्भावित आवश्यक उपकरणको रूपमा लिइन्छ। अझै पनि विश्वव्यापी रूपमा ठूलो संख्यामा ग्रामीण महिलाहरू आधारभूत शिक्षाबाट वञ्चित छन् र अशिक्षित छन्। जे होस्, यी कार्यक्रमहरूले विपन्न ग्रामीण महिलाहरूको जीविकोपार्जनमा पार्ने प्रभावलाई कम अध्ययन र अभिलेखीकरण गरिएको छ।

उद्देश्य: यस अनुसन्धान अध्ययनको उद्देश्य नेपालको टीकापुर क्षेत्रका पिछडिएका ग्रामीण महिलाहरूको जीविकोपार्जनमा कार्यात्मक साक्षरता शिक्षा कार्यक्रमको प्रभाव मूल्याङ्कन गर्न हो।

सहभागीहरू: यसअघि साक्षरता शिक्षा केन्द्र खोलिएका नुक्लीपुर, बंकट्टी, चमेलीपुर, दुर्गौली र लाइकपुर क्षेत्रका पाँच गाउँका टीकापुर क्षेत्रबाट ५ किलोमिटर परिधिभित्र सर्वेक्षणमा सहजै उपलब्ध र भाग लिन इच्छुक सहभागीहरूको करिब १५० मात्रात्मक अन्तर्वार्ता लिई सहभागीता जनाइएको छ। शिक्षा कार्यक्रम सञ्चालन गरिनेछ।

अध्ययनमा सहभागिताको बाख्खा: कृपया सहमति फारम ध्यानपूर्वक पढ्नुहोस्। यदि तपाईं पढ्न असमर्थ हुनुहुन्छ भने, तपाईंको साथी, आफन्त वा तपाईं जसलाई विश्वास गर्नुहुन्छ, तपाईंलाई यो पढ्नको लागि सोध्न सक्नुहुन्छ। यस फारममा यस अध्ययनमा सहभागितासँग सम्बन्धित महत्त्वपूर्ण जानकारीहरू छन्। तपाईंलाई सम्पर्क गरेको व्यक्तिले अनुसन्धानको बारेमा व्याख्या गर्नेछ। यो अनुसन्धानमा भाग लिने वा नगर्ने निर्णय गर्ने अधिकार मात्र तपाईंको हो। यदि तपाईं यस अनुसन्धानमा भाग लिन सहमत हुनुहुन्छ भने, हामी तपाईंलाई फारममा हस्ताक्षर गर्न अनुरोध गर्दछौं। हस्ताक्षरित सहमति फारमको एक प्रतिलिपि तपाईंलाई दिइनेछ।

सहभागिता स्वैच्छिक □ : यो सर्वेक्षणमा भाग लिने वा नगर्ने यो तपाईंको छनौट हो। यदि तपाईं सहभागी हुन रोज्नुहुन्छ भने, तपाईं आफ्नो मन परिवर्तन गर्न सक्नुहुन्छ र कुनै पनि समयमा अध्ययन छोड्न सक्नुहुन्छ। हामी तपाईंलाई आश्वासन दिन्छौं कि यदि तपाईंले भाग लिन अस्वीकार गर्नुभयो वा तपाईंले आफ्नो सहभागिता बन्द गर्नुभयो भने, तपाईंको फाइदाहरूमा कुनै दण्ड वा हानि हुनेछैन जुन तपाईं अहिले वा भविष्यमा अन्यथा हकदार हुनुहुन्छ। तिमीले जे निर्णय गरे पनि त्यो तिम्रो विरुद्धमा हुने छैन। तपाईंले निर्णय गर्नु अघि कुनै पनि प्रश्न सोध्न स्वतन्त्र महसुस गर्नुहोस्।

अन्तर्वार्ता अवधि: यदि तपाईं सहभागी हुन सहमत हुनुहुन्छ भने, हामी तपाईंको अन्तर्वार्ता एक पटक मात्र लिनेछौं। अन्तर्वार्ता ३० मिनेट भन्दा कम लाग्नेछ। हामी तपाईंको लागि उपयुक्त हुने ठाउँ र समयको व्यवस्था गर्नेछौं। हामीले तपाईंलाई पहिले सहभागी भएको कार्यात्मक साक्षरता शिक्षा कार्यक्रमको बारेमा तपाईंको अनुभवसँग सम्बन्धित केहि प्रश्नहरू सोध्नेछौं। यदि तपाईं कुनै पनि कारणले सोधिएको कुनै प्रश्नको जवाफ दिन चाहनुहुन्न भने, तपाईं अर्को प्रश्नमा जान सक्नुहुन्छ।

यस अनुसन्धान अध्ययनमा हुनबाट कुनै प्रत्यक्ष लाभहरू पैनन: यस अनुसन्धानमा तपाईंको सहभागिताबाट तपाईंलाई कुनै प्रत्यक्ष लाभहरू छैनन्। यद्यपि, हामी विश्वास गर्छौं कि यो अध्ययनले ग्रामीण विपन्न महिलाहरूको सुधारका लागि नेपालमा यस्तै कार्यक्रमहरू डिजाइन गर्नको लागि डाटाबेस स्थापना गर्न उपयोगी हुनेछ।

कुनै जोखिम र असुविधा पैनन: यस अध्ययनमा भाग लिनु वा अध्ययन प्रश्नहरूको जवाफ दिँदा कुनै पनि जोखिम वा असुविधा छैन। यदि तपाईं कुनै प्रश्नको जवाफ दिन सहज महसुस गर्नुहुन्न भने, हामी त्यो भाग छोड्न सक्छौं।

कुनै वित्तीय प्रोत्साहन पैनन: तपाईंले न त आफ्नो सहभागिताको लागि भुक्तान गर्नु पर्छ न त यस अध्ययनमा भाग लिनेको लागि कुनै आर्थिक प्रोत्साहन प्राप्त गर्नुहोस्।

गोपनीयता सुरक्षित □ : हामी भविष्यमा तपाईंबाट थप जानकारी चाहिन्छ भने तपाईंलाई सम्पर्क गर्न अनुसन्धान उद्देश्यको लागि हामी तपाईंको नाम र सम्पर्क जानकारी संकलन गर्दछौं। हामी तपाईंको सुविधा अनुसार एक निजी स्थानमा अन्तर्वार्ता लिनेछौं। तपाईंको प्रतिक्रिया गोप्य राखिनेछ। हामी तपाईंको कुनै पनि व्यक्तिगत जानकारी वा पहिचान साझा गर्दैनौं। हामी तपाईंको नाम वा जानकारी कुनै पनि प्रकाशन वा प्रस्तुतिहरूमा तपाईंलाई पहिचान गर्न प्रयोग गर्दैनौं।

सहमतिको कथन

जोखिम र सम्भावित लाभहरू सहित यो सहमति फारममा रहेको जानकारीको बारेमा मैले मेरो पढेको/बुझेको छु। अनुसन्धानको बारेमा मेरा सबै प्रश्नहरूको जवाफ मेरो सन्तुष्टिको लागि दिइएको छ। म बुझ्छु कि म कुनै पनि दण्ड वा हानि बिना कुनै पनि समयमा फिर्ता लिन स्वतन्त्र छु जुन म अन्यथा हकदार छु। यदि मलाई पछि कुनै प्रश्न छ वा मैले यस अनुसन्धान मार्फत केहि तनाव वा समस्या महसुस गरेमा म यस फारममा प्रदान गरिएको जानकारीमा सम्पर्क गर्न सक्छु। म यो फारमको प्रतिलिपि प्राप्त गर्नेछु।

त्यसैले, म यस अध्ययनमा भाग लिन मेरो सहमति दिन्छु।

<p>.....</p> <p>सहभागीको नाम</p> <p>.....</p>	<p>.....</p> <p>सहभागीको हस्ताक्षर</p> <p>.....</p>	<p>.....</p> <p>मिति</p> <p>.....</p>
<p>गणनाकर्ताको नाम</p>	<p>गणनाकर्ताको हस्ताक्षर</p>	<p>मिति</p>

प्रतिक्रिया फारम


(प्रशिक्षार्थीहरूले नाम प्रविष्ट गर्न आवश्यक छैन)

उमेर: लिंग जाती:
 धर्म:
 गाउँको नाम:
 शिक्षा वर्ष २०१३-२०२२ सम्म

कृपया भविष्यमा अझ राम्रो पाठ्यक्रमहरूको लागि निम्न सामग्रीहरूमा आफ्नो राय दिनुहोस्। कृपया आफूलाई उपयुक्त ठानेको स्तर तल्लो देखि उच्च सम्म सर्कल गर्नुहोस्। केवल एक स्तर सर्कल गर्नुहोस् र कुनै पनि सामग्री खाली नछोड्नुहोस् ।

No.	विवरणहरू	सन्तुष्टि दर (१ - ५)कम देखि उच्च सम्म				
A. प्रशिक्षण पाठ्यक्रम		कम उच्च				
1	प्रशिक्षण पाठ्यक्रमका उद्देश्य र सामग्रीहरू मेरो क्यारियरको लागि उपयोगी छन् ।	1	2	3	4	5
2	तालिम कोर्सले मलाई आम्दानी बढाउन मद्दत गर्छ ।	1	2	3	4	5

No.	विवरणहरू	सन्तुष्टि दर (१ - ५)कम देखि उच्च सम्म				
A. प्रशिक्षण पाठ्यक्रम		कम उच्च				
3	तालिम पाठ्यक्रमका विषयहरू तालिम पाठ्यक्रमको उद्देश्य र उद्देश्यसँग मिल्दोजुल्दो छन् ।	1	2	3	4	5
B. सुविधा		कम ←→ उच्च				
4	शिक्षा स्थान स्थल पहुँच गर्न सुविधाजनक छ ।	1	2	3	4	5
5	कक्षाकोठाको लागि सिकाइ , सुविधा र स्टेशनरीहरूको गुणस्तर	1	2	3	4	5
6	आवास/शिक्षा वातावरणको सन्तुष्टि	1	2	3	4	5
C. प्रशिक्षक (लेक्चरर)		कम ←→ उच्च				
7	सामग्री र ढाँचा सम्बन्धी उनीहरूको व्याख्यानको लागि प्रशिक्षकहरूको तयारी	1	2	3	4	5
8	प्रशिक्षकहरूको अनुभव , ज्ञान , शिक्षण विधिको योग्यता	1	2	3	4	5
9	प्रशिक्षक र प्रशिक्षार्थीहरू संग संचार	1	2	3	4	5
10	व्याख्यान रोचक र बुझ्न सजिलो छ ।	1	2	3	4	5
11	व्याख्यानहरूले मलाई काममा लागू गर्नको लागि आलोचनात्मक सोच र रचनात्मकता विकास गर्न प्रेरित	1	2	3	4	5

No.	विवरणहरू	सन्तुष्टि दर (१ - ५)कम देखि उच्च सम्म				
A. प्रशिक्षण पाठ्यक्रम		कम उच्च				
12	समूह छलफल ,सीप र अनुभव साझेदारी गतिविधिहरू व्याख्यानहरूमा एकीकृत हुन्छन् ।	1	2	3	4	5
D. Overview		कम उच्च 				
13	यो प्रशिक्षण पाठ्यक्रम मेरो पेशा को लागी विशेष गरी उपयोगी छ।	1	2	3	4	5
14	सम्पूर्ण प्रशिक्षण पाठ्यक्रम संग मेरो सन्तुष्टि छ।	1	2	3	4	5
15	व्यवसायिक क्षमता सुधार गर्न हामीलाई वास्तवमै थप समान प्रशिक्षण पाठ्यक्रमहरू चाहिन्छ छ।	1	2	3	4	5

1. साक्षरता शिक्षामा सहभागिताको उद्देश्य

1.1. यस शिक्षा कार्यक्रमको बारेमा तपाईंलाई कसरी थाहा भयो?

1. मैले एक परिचितको सिफारिसमा भाग लिएँ।
2. मैले आफ्नो लागि भाग लिएँ।
3. अन्य (.....)

1.2. यो शिक्षा प्राप्त गर्नुको मुख्य उद्देश्य के थियो?

1. मेरो व्यक्तिगत अनुकूलन र विकासको लागि
2. सुखी गृह जीवनको लागि
3. समुदाय र गाउँको विकासको लागि
4. कार्य जीवनको गुणस्तर बढाउनको लागि
5. अन्य(.....)

2. शैक्षिक प्रभाव को मूल्याङ्कन

2.1. यस शिक्षाको समग्र प्रभावलाई तपाइँ कसरी सोच्नुहुन्छ?

1. शिक्षा प्रभावहीन छ ।

यदि हो भने कृपया कारण उल्लेख गर्नुहोस्
(.....)

2. शिक्षा केही हदसम्म प्रभावकारी छ ।

यदि हो भने कृपया कारण उल्लेख गर्नुहोस्
(.....)

3. शिक्षाको ठूलो प्रभाव छ ।

यदि हो भने कृपया कारण उल्लेख गर्नुहोस्
(.....)

2.2. के अर्को पटक अवसर पाएपछि शिक्षा कार्यक्रममा सहभागी हुनुहुनेछ?

1. म गर्दिन ।

2. परिस्थितिले अनुमति दिएमा म सहभागी हुनेछु ।

3. म पक्कै अर्को पटक सहभागी हुनेछु ।

4. अन्य (.....)

2.3. के तपाईं अर्को पटक आफ्ना छिमेकीहरूलाई शिक्षा कार्यक्रम सिफारिस गर्नुहुन्छ?

1. गर्छु
2. गर्दिन

2.4. के पढाई पछि तपाईंको जीवनमा कुनै परिवर्तन आएको छ?

1. मसँग कुनै परिवर्तन भएको छैन ।

यदि हो भने कृपया कारण उल्लेख गर्नुहोस्
(.....)

२. मसँग केही परिवर्तनहरू भएको छ ।

यदि हो भने कृपया कारण उल्लेख गर्नुहोस्
(.....)

2.5. के तपाईंले शिक्षा कार्यक्रम पछि आयसँग सम्बन्धित कुनै काम नयाँ सुरु गर्नुभएकोछ?

1. छ
2. छैन

माथिको प्रश्नमा तपाईंको उत्तर छ हो भने तपाईंले कुन प्रकारको काम गर्न थाल्नुभयो ?

.....

तपाईं मासिक कति कमाउनुहुन्छ?

.....

2.6. शिक्षा कार्यक्रम पछि आम्दानीको पर्वह नगरी नयाँ कामहरू छन्?

1. छन्

2. छैनन्

माथिको प्रश्नमा तपाईंको उत्तर छन् हो भने, यो कस्तो प्रकारको काम हो?

.....

प्रेरणा के

हो?.....

2.7. सम्भव भएमा भविष्यमा कस्तो जागिर पाउन चाहनुहुन्छ?

.....

2.8. के तपाईंलाई यो शिक्षा कार्यक्रमले समाजको उन्नति र विकासमा सहयोग पुग्छ जस्तो लाग्छ?

1. लाग्छ

2. लाग्दैन

यदि माथिको प्रश्नमा तपाईंको उत्तर लाग्छ हो भने तपाईंको भूमिका के हुनेछ?

.....

2.9. के तपाईं यो शिक्षा कार्यक्रम पछि पढ्न र लेख्न सक्नुहुन्छ?

1. सक्छु
2. सकिदैन

2.10. यो शिक्षा कार्यक्रममा कति समय सम्म सहभागी हुनुभयो?

.....

2.11. यस शैक्षिक कार्यक्रममा सहभागी भइसकेपछि आफ्नो पढ्ने र लेख्ने क्षमताबाट तपाईं कततिको सन्तुष्ट हुनुहुन्छ?

1. धेरै
2. मध्यम
3. थोरै
4. पटककै होइन

3. स्वास्थ्य धारणा र स्वच्छता मा शिक्षा कार्यक्रम को प्रभाव

3.1. के तपाईंलाई महिनावारी सरसफाईको बारेमा जानकारी छ?

1. छ
2. छैन

3.2. छाउपडी अभ्यास गर्नुहुन्छ?

1. गर्छु
2. गर्दिन

3.3. महिनावारीको समयमा सरसफाइमा ध्यान नदिँदा रोग लाग्न सक्छ ।

1. दृढतापूर्वक सहमत
2. सहमत
3. असहमत
4. कडा रूपमा असहमत

3.4. महिनावारीको समयमा जननांगलाई सफा अवस्थामा राख्नको लागि सफा पानीको पहुँच र जननांग सफा गर्न साबुनको प्रयोग महत्त्वपूर्ण छ ।

1. दृढतापूर्वक सहमत

2. सहमत

3. असहमत

4. कडा रूपमा असहमत

3.5. जननांग क्षेत्र सफा गर्नु अघि हात धुनुले प्रजनन संक्रमण रोक्न सक्छ ।

1. दृढतापूर्वक सहमत

2. सहमत

3. असहमत

4. कडा रूपमा असहमत

3.6. महिनावारी रोगको कारण हुन्छ ।

1. दृढतापूर्वक सहमत

2. सहमत

3. असहमत

4. कडा रूपमा असहमत

3.7. सफा सेनेटरी प्याड/पुनः प्रयोज्य कपडा प्रयोग गर्नु महिनावारी सरसफाईको लागि धेरै महत्त्वपूर्ण छ ।

1. दृढतापूर्वक सहमत

2. सहमत

3. असहमत

4. कडा रूपमा असहमत

3.8. पुनः प्रयोज्य कपडा धुन के प्रयोग गर्नुहुन्छ?

1. साबुन र पानी

2. केवल पानी

3.9. महिनावारीका सामाग्रीहरुको विसर्जन कसरी गर्ने?

1. खुला क्षेत्रमा

2. शौचालयमा

3. बिनमा राख्ने

3.10. के तपाईंलाई लाग्छ कि यो शिक्षा कार्यक्रमले तपाईंलाई महिनावारी सरसफाईको बारेमा आफ्नो ज्ञान सुधार गर्न मद्दत गर्छ?

1. दृढतापूर्वक सहमत

2. सहमत

3. असहमत

4. कडा रूपमा असहमत

3.11. के तपाईंलाई ANC को न्यूनतम भ्रमणको फ्रिक्वेन्सीको ज्ञान छ?

1. छ
2. छैन

3.12. के तपाईंलाई गर्भावस्थाको समयमा जोखिमपूर्ण लक्षणहरूको ज्ञान छ?

1. छ
2. छैन

3.13. के तपाईंलाई गर्भावस्थाको समयमा पूरक औषधिहरू (आइरन, जिंक, फोलिक एसिड, आदि) बारे ज्ञान छ?

1. छ
2. छैन

3.14. के तपाईंलाई गर्भावस्थाको समयमा र पछि सन्तुलित आहार खाने बारे ज्ञान छ?

1. छ
2. छैन

3.15. के तपाईंलाई खोपको बारेमा ज्ञान छ?

1. छ

2. छैन

3.16. के तपाईंलाई गर्भावस्थाको लागि उपयुक्त उमेरको ज्ञान छ?

1. 18 वर्ष मुनि

2. 18 वर्ष पछि

3.17. के तपाईंलाई लाग्छ कि यो शिक्षा कार्यक्रमले तपाईंलाई मातृ स्वास्थ्यको बारेमा आफ्नो ज्ञान सुधार गर्न मद्दत गर्दछ?

1. दृढतापूर्वक सहमत

2. सहमत

3. असहमत

4. कडा रूपमा असहमत

3.18. के तपाईं खाना खानु अघि र शौचालय प्रयोग पछि हात धुनु महत्त्वपूर्ण छ जस्तो लाग्छ?

1. दृढतापूर्वक सहमत

2. सहमत

3. असहमत

4. कडा रूपमा असहमत

3.19. के तपाईंलाई शिक्षा कार्यक्रमले स्वास्थ्य धारणा र सरसफाइमा तपाईंको ज्ञान सुधार गर्न मद्दत गर्छ जस्तो लाग्छ?

1. दृढतापूर्वक सहमत
2. सहमत
3. असहमत
4. कडा रूपमा असहमत

तपाईंको प्रतिक्रियाको लागि धेरै धेरै धन्यवाद!!

X. ABSTRACT IN KOREAN

네팔 티카풀 농촌지역 소외계층 여성의 실용적 문해교육이

생활에 미치는 영향

Impact of Functional Literacy Education Program on the Livelihoods of
Underprivileged Women in Rural Tikapur, Nepal

나 중 선

여성의 권한강화와 건강, 문해력은 지역사회 복지증진에 필수적이다. 교육과 다양한 훈련을 통해 여성에게 권한을 부여하는 것은 여성의 번영과 포괄적인 건강을 보장하는데 중요한 역할을 한다. 이 연구는 네팔 카일랄리 지역의 기능적 문맹 프로그램에 참여한 소외된 농촌 어머니의 만족도와 경험을 조사하였다. 우리는 생리위생에 대한 관행과 모성 건강 인식을 연구하는 동안 교육과정, 시설 및 강사를 조사하여 프로그램이 얼마나 효과적인지에 대한 참가자의 인식을 평가하였다. 편의 표본 추출을 통해 티카풀 근처의 5개 농촌 마을에서 141명의 소외된 여성을 마히마 그룹이 운영하는 문해력 교육센터에서 선정하였다. 서술적 분석, 스

피어만스로 상관관계, 피어슨의 카이제곱 검정을 포함한 구조화된 설문지와 통계분석을 활용하여 참가자의 65.2%가 높은 만족도를 표현한 것으로 나타났다. 또한 96.5%가 이 프로그램이 매우 효과적이라고 생각했으며, 97.9%가 문해력 향상으로 보고되었고 96.5%가 생리 위생에 대한 인식이 높아졌다고 보고되었다. 또한 97.2%가 이 프로그램이 모자건강 지식을 향상시켰다고 동의하였다. 교육 과정, 시설, 강사 및 전반적인 교육 인식 간에 유의미한 상관관계가 관찰되었다. 이와 관련된 연령대 ($p = 0.003$)와 지역 ($p = 0.023$) 간에 문해력 프로그램에 대한 만족도 역시 유의미한 연관성이 발견되었다. 이러한 결과는 문해력 프로그램 참여자의 만족도가 그들의 삶에 영향을 미치고 있으며, 소외된 지역 사회에 힘을 실어주게 되고 지속 가능한 개발을 위해 이 프로그램을 더 광범위하게 시행할 근거를 제시한다.

키워드: 문맹, 실용적 문해교육 프로그램, 농촌여성, 네팔, 티카폴