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From didactic to personalized health and nutrition counselling: A mixed-methods review of the GALIDRAA approach in Nepal

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Abstract

GALIDRAA (greet, ask, listen, identify, discuss, recommend, agree, and appoint), an interpersonal communication method, is used in health and nutrition behaviour change programmes to structure communication between front-line workers (FLWs) and beneficiaries. However, programmatic experiential evidence and monitoring and evaluation of the method are scarce. Suaahara aims to address maternal and child undernutrition, in part by influencing household-level behaviours. Suaahara trained both government and programme FLWs in GALIDRAA for use during counselling. This study investigates their adherence to the GALIDRAA method 2 years later, using quantitative and qualitative data from a 2014 process evaluation study. Descriptive and thematic analyses were conducted to assess adherence to GALIDRAA. We found variation in adherence to each of the eight GALIDRAA steps among both Suaahara field supervisors (FSs) and Nepal's female community health volunteers (FCHVs). The prevalence of FLWs identifying a beneficiary's problem, discussing, questioning, and probing for constraints with the beneficiary, and, only then, recommending a doable solution, that is, the process of personalized nutrition counselling, was substantially higher among Suaahara FSs than FCHVs. However, both FCHVs and FSs counselling skills, particularly regarding adherence to each step of the GALIDRAA approach, have room for improvement. This highlights the need for additional training and post-training follow-up including supportive supervision related to appropriate counselling methods such as GALIDRAA and may indicate that there are additional FLWs constraints, beyond knowledge, that programmes need to address.

KEYWORDS

counselling, FCHVs, GALIDRAA, health promotion, Nepal, nutrition

1 | INTRODUCTION

Nearly half of the South Asian population suffers from malnutrition (Black et al., 2013). Nutrition currently receives unprecedented attention and funding from international donors, policymakers, academics, and non-governmental organizations, strengthened by the evidence from the 2008 and 2013 Lancet Series on Maternal and Child Nutrition as well as the launch of the Scaling Up Nutrition movement in 2010 (Black et al., 2008, 2013; SUN Movement Secretariat, 2012).

Many programmes prioritize women and children in the first 1,000 days of life between conception and a child's second birthday, a window of opportunity for preventing long-term malnutrition. Policies and programmes in low- and middle-income countries now tend to focus on both nutrition-sensitive and nutrition-specific actions, recognizing the important role of health systems strengthening and integrating nutrition into health systems (Ruel & Alderman, 2013). In South Asia, development interventions have used various social and behaviour change communication (SBCC) approaches to promote

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optimal nutrition, health, and hygiene behaviours such as exclusive breastfeeding, appropriate timing and frequency of complementary foods, and handwashing with soap and water (Dewey & Adu-Afarwuah, 2008; Jones, Specio, Shrestha, Brown, & Allen, 2005; Piotrow, Kincaid, Rimon, Rinehart, & Samson, 1997).

SBCC has shown promising results for preventing malnutrition (Ahmed, Zeitlin, Beiser, Super, & Gershoff, 1982; Ruel et al., 2008), and these efforts usually include some form of interpersonal communication (IPC), defined as direct contact between a front-line worker (FLW) and beneficiaries. However, effective IPC requires FLWs to possess high-level communication and negotiation skills. This is a common field-level challenge: usually, the FLWs greet, listen quickly to the problem, and offer didactic solutions with generic information in a traditional teacher-student approach; genuine discussion of problems, probing for constraints and the options for addressing them-that is, personalizing the counselling-is uncommon. Recognizing this, public health experts have developed tools for equipping FLWs with these types of skills for their behaviour change work. For example, the "GATHER" (greet, ask, tell, help, explain, and return) approach to counselling is commonly used in reproductive health and family planning programmes (Rinehart, Rudy, & Drennan, 1998). In nutrition, a similar negotiation method GALIDRAA (greet, ask, listen, identify, discuss, recommend, agree, and appoint) is now commonly used by programmes striving for behaviour change (SPRING, 2014; Huybregts et al., 2017; USAID, 2016; (Amhara National Regional State Health Bureay, 2009; SPRING, 2014; USAID, 2016). The U.S. Agency for International Development (USAID) advocates that programme facilitators engage beneficiaries on Essential Nutrition Actions and Essential Hygiene Actions using the GALIDRAA method (Guyon, Quinn, Nielsen, & Stone-Jimenez, 2015). GALIDRAA may be particularly valuable in low- and middle-income countries where women face many constraints to behaviour change including inadequate understanding of messages promoted by FLWs, lack of time and other resources to implement what she may know to be the best course of action, and household dynamics that prevent her from engaging in a promoted behaviour even if she fully understands and agrees.

Suaahara, a USAID-funded integrated nutrition programme (2011–2016; 2016–2021) in Nepal seeks to improve nutritional status among mothers and children in the 1,000-day period, in part by improving household-level health and nutrition behaviours. Although Nepal has made incredible strides in reducing undernutrition among women and children, the absolute rates remain high, and recent analysis highlights that one constraint is lack of progress on key nutrition behaviours, such as infant and young child feeding (Cunningham, Headey, Singh, Karmacharya, & Rana, 2017; Headey, Hoddinott, & Park, 2017). During the first phase of Suaahara (2011-2015), activities were implemented in 25 of Nepal's 75 districts, using a district-wide approach (Cunningham & Kadiyala, 2013). Suaahara activities were implemented through both Suaahara-hired and government FLWs, such as Suaahara field supervisors (FSs) and Nepal's cadre of female community health volunteers (FCHVs), who have been Nepal's cadre of community health workers, particularly active in maternal and child health, since the Vitamin A campaign in the early 1980s. These FLWs, among others, were vital to delivery of Suaahara interventions,

Key messages

- Two years after training, the variation among front-line workers regarding whether they adhered to, and if so, the quality of implementation of, each step of the recommended interpersonal counselling method highlights the importance of post-training activities.
- Greater adherence to the counselling method by programme, compared with government, front-line workers may suggest that the methods were easier to adapt by the younger, more educated cadre or that prior training on similar methods for government frontline workers has created a barrier.
- Additional programmatic evidence and rigorous research are needed to understand how, why, and in which contexts health workers have the ability, time, and interest to engage in nutrition programming, specifically interpersonal counselling; given the varied determinants of malnutrition, front-line workers may need to facilitate numerous engagements, spanning sectors in which she/he may be less familiar.

including an intensive package of SBCC interventions to ensure sustainable improvements in nutrition (Suaahara, 2013).

For one-on-one interactions between the FCHVs and FSs and programme beneficiaries, particularly home visits required of the FSs and encouraged of the FCHVs, the GALIDRAA method was adopted to ensure a consistent stepwise approach to counselling across intervention areas and to structure the communication aiming to achieve a negotiated solution or incremental step towards improvements in health and nutrition-related practices (Suaahara, 2012). Both FCHVs and FSs were given a 5-day community-level training on integrated nutrition and on counselling skills in 2012, jointly designed by the Nepal Ministry of Health and Suaahara. All FCHVs in each intervention district were asked to follow-up on the community level training by rolling out a ward-level interaction on integrated nutrition for families in the 1,000-day period and community decision-makers. A team was formed to monitor and critically assess the quality of the trainings; government staff and Sugahara staff were involved in joint supervision and monitoring of the trainings. Once trained, FLWs were requested to use the GALIDRAA approach during individual counselling and group sessions with mothers on all thematic areas that Suaahara works across, including nutrition, health and family planning, and water, sanitation, and hygiene, among others (Suaahara, 2013).

Although there is some evidence that training health workers in nutrition counselling can improve child nutrition practices (Sunguya et al., 2013), there is little evidence to date on GALIDRAA. This relatively new counselling method promoted by USAID also lacks experiential data around the uptake of the method by FLWs and factors that may influence adherence, which are important for programmes to consider. This study uses a mixed-methods approach to investigate adherence to the GALIDRAA method in Nepal by FCHVs and *Suaahara* FSs while counselling programme beneficiaries, 2 years after the initial training.

2 | METHODS

For this analysis, we used data from *Suaahara's* process evaluation (PE), which included a mixed-methods FLWs study. Data collection took place from November to December 2014. The quantitative FLWs study was done by Valley Research Group (VaRG). Enumerators were trained for 2 weeks on interview techniques, study details and tools and data quality measures and engaged in field practice. The questionnaires used were created in English and after translation and backtranslation, they were field-tested and finalized in consultation with *Suaahara*. Each data collection team included a supervisor to monitor data collection. All data were collected electronically on smart phones with password protection.

The qualitative FLWs study was conducted by the Health Research and Social Development Forum and involved focus group discussions (FGDs) and shadowing, a participant observation technique. Field researchers were trained for 8 days on qualitative research techniques and ethics, study design, FGDs, and shadowing. The tools were finalized after field testing. For the FGDs, a semi-structured FGD guide was used, and for shadowing, a field guide was also used. Shadowing involved a researcher closely following each FLWs for a full work day and observing and noting what they do and how they do it, including their activities but also their dress, behaviours, and style of interaction with beneficiaries and the wider community (Quinlan, 2008). Field researchers first completed shadowing of FLWs and then conducted the FGDs. This sequence prevented potential bias as FLWs were unaware of the specific themes and content of our study and therefore could not alter behaviour accordingly during the observation. Secondly, this sequence also allowed field researchers to clarify and probe for interesting aspects observed during shadowing in the subsequent FGDs.

To ensure continuity of data availability, the subsample for the PE (eight districts) was a subset of the *Suaahara* impact evaluation baseline survey areas. This survey, conducted in 2012, covered 16 districts (eight randomly selected intervention and eight matched comparison), five village development committees (VDCs) per district, and three wards per VDC, selected randomly using population proportional to size techniques. As four of the eight baseline comparison districts were soon to become intervention districts, at the time of the PE, the remaining four districts and their matched control area were selected as the sub-study for the PE. Within each PE study district, the sub-district sampling was the same as the baseline survey. However, the qualitative study only included the four intervention districts (Darchula, Rupandehi, Sindhupalchowk, and Syangja).

Thus, in each of the 20 VDCs, one FSs and three FCHVs from the sampled wards were the intended sample for both the quantitative survey and shadowing. In each of the 20 VDCs, two FGDs were also conducted, one with FLWs from the health sector (including FCHVs and FSs) and the other with FLWs from non-health sector (agriculture, livestock, and so on), bringing the total to 40. As two participants (one FCHV from Sindhupalchowk and one FSs from Rupandehi) were unavailable during the data collection period, the sample for this analysis is 20 FSs and 59 FCHVs. It is important to note that 11 of the 20 FSs and 16 of the 59 FCHVs were shadowed during home visits, whereas the remaining FLWs were shadowed during other

programme activities (such as food demonstration and handwashing) or while they were busy with household chores or working in their fields. In this analysis, we only looked at the four intervention districts (and the corresponding 20 VDCs and 60 wards) due to our interest in triangulation of the quantitative and qualitative findings. We have also limited our analysis of FGD data to only the 20 health group FGDs, since GALIDRAA was primarily used by FSs and FCHVs (part of the health group FGD).

For the quantitative data, all cleaning, management and analyses were conducted in Stata 14. We conducted descriptive analysis of background information, including exposure to training in relevant thematic areas and in counselling methods, and of the FCHVs and FSs reported frequency of adherence (always, sometimes, often, rarely, and never) to each of the eight steps in the GALIDRAA method. Lastly, we tested for significance of the differences found between FCHVs and FSs, who reported to always engage in each step.

For the qualitative data, each transcript was read at least twice and coded manually. The core research team from Health Research and Social Development Forum developed preliminary codes after reading the transcripts, which were shared and discussed with the Suaahara team to decrease personal interpretations and increase credibility of the study results. After an iterative process to finalize the code list, the dataset was coded in Atlas.ti. software program. Thematic analysis was conducted starting from the process of coding itself. Two coders first coded the same five transcripts and then discussed to ensure a common understanding regarding the codes. Codes generated from both coders were compiled into a preliminary coding framework with a few (3-5) broad themes and numerous sub-themes. The remaining transcripts were coded iteratively by the two coders, wherein new codes were added/merged with continuous reflections and discussions on the codes to maintain consistency. Output files from Atlas.ti were printed and read thoroughly to identify linkages and patterns in the data. Iterative discussions and reflections were conducted throughout the process of reading and identifying patterns in the data.

Ethical approval from the Nepal Health Research Council was received for both the quantitative and qualitative PE studies. Participation in the study was voluntary, and written informed consent was collected prior to each interview, FGDs, and shadowing.

3 | RESULTS

3.1 | Background information regarding sample population

Socio-demographic and job-related characteristics of the sample are outlined in Table 1. Of the total sample included in all three study components (survey, FGDs, and shadowing), we had data on 20 FSs and 59 FCHVs. Sixty per cent of the FSs were female. All the FSs and 90% of the FCHVs were Hindu, and the majority of both the FSs and FCHVs belonged to the Pahadi Bahun Chhetri caste. The FSs were younger than the FCHVs (FSs: 26 years; FCHVs: 42 years; P < 0.001) and had a higher level of schooling (FSs: 12.7 years; FCHVs: 5.4 years; P < 0.001). Although both lived in houses with an average of

 TABLE 1
 Background characteristics of sample FCHVs and Suaahara FS

	FCHVs (N = 59)	FSs (N = 20)		
	M (SD)/% (N)	M (SD)/% (N)	P value	
Female	98.3 (58)	60.0 (12)	<0.001	
Age (completed years)	41.5 (10.5)	25.9 (6.9)	<0.001	
Native language: Nepali	64.4 (38)	95.0 (19)	0.15	
Religion: Hinduism	90.0 (53)	100.0 (20)	0.14	
Caste			0.24	
Pahadi Bahun Chhetri	61.1 (36)	80.0 (16)		
Himali Pahadi Janajati	18.6 (11)	10.0 (2)		
Terai Janajati	10.2 (6)	0.0 (0)		
Other Madheshi Terai Jati	3.4 (2)	5.0 (1)		
Terai dalit	5.1 (3)	0.0 (0)		
Pahadi dalit	0.0 (0)	5.0 (1)		
Madhesi Terai Bahun Chhetri	1.7 (1)	0.0 (0)		
Muslim	0.0 (0)	0.0 (0)		
Education (number of years of schooling)	5.4 (3.9)	12.7 (0.9)	<0.001	
Education levels				
Never attended school	23.7 (14)	0.0 (0)		
Started school but not completed primary	15.2 (9)	0.0 (0)		
Completed only primary school (Grades 1-5)	8.5 (5)	0.0 (0)		
Some secondary school (Grades 6-9)	35.6 (21)	0.0 (0)		
Completed only secondary school (Grade 10)	15.3 (9)	10.0 (2)		
Higher education	1.7 (1)	90.0 (18)		
Assets owned (range: 2–15)	9.5 (3.2)	8.3 (3.5)	0.15	
Animals owned (range: 0-7)	2.9 (1.7)	1.8 (1.9)	0.02	
House ownership (owns)	100.0 (59)	65.0 (13)	<0.001	
Number of bedrooms	3.3 (1.5)	2.6 (1.5)	0.07	
Non-FLW work outside the home	50.9 (30)	10.0 (2)	<0.001	
Training: Received ever				
Health, nutrition, WASH, family planning, or agriculture	98.3% (58)	100.0% (20)	0.56	
Counselling methods	76.3% (45)	95.0% (19)	0.07	
Training: Received in last 12 months				
Health, nutrition, WASH, family planning, or agriculture	95.0% (56)	100.0% (20)	0.30	
Counselling methods	47.5% (28)	45.0% (9)	0.84	
Number of days of training in last 12 months	5.5 (4.2)	16.0 (7.6)	<0.001	

Note. FCHVs: female community health volunteers; FLW: front-line worker; FS: field supervisors; WASH: water, sanitation, and hygiene.

three rooms, FCHVs owned three animals on average, whereas FSs owned two (P = 0.02). Other FLWs work outside the home was less prevalent among FSs than FCHVs (FSs: 10%; FCHVs: 51%; P = 0.001). Their exposure to thematic trainings or training on counselling ever in their careers or in the year prior to the survey was similar. However, FSs reported having three more days of trainings on any subject ever in their careers compared with the FCHVs (FSs: 16.4 days; FCHV: 13.4 days; P < 0.001), and in the past 12 months, the FSs reported having 10.5 more days of training on any *Suaahara*-related subject on average than the FCHVs (FSs: 16.0 days; FCHV: 5.5 days; P < 0.001).

3.2 | Adherence to GALIDRAA: Reported and observed

The FLWs' reported adherence to each step in the GALIDRAA method while counselling mothers is detailed in Table 2.

Approximately 80% of FCHVs reported that they always greet the mothers, and more than half of the FCHVs reported to always listen to what the mothers had to say (70%). However, less than half of the FCHVs, and in most cases, less than one in three, reported always: asking the mother about any problems (37%), identifying the causes of the issue (24%), discussing options for resolving the issue (32%), recommending a doable solution (34%), agreeing on next steps (31%), and making a follow-up appointment (36%). Although many FCHVs reported often engaging in these GALIDRAA steps, the prevalence of reporting to only sometimes or rarely following these steps was 20% or more for each one, other than the first three (greet, ask, and listen).

Among the FSs, 100% reported always greeting the mothers before asking about her current situation, and more than half always asked about current issues and recommending a doable solution. However, less than half of FSs reported to engage in the other steps

TABLE 2 Adherence to GALIDRAA steps, by FCHVs and *Suaahara* FSs

GALIDRAA	FCHVs (N = 59)	FSs (N = 20)	FSs (N = 20)	
steps	% (N)	% (N)	P value	
Greet				
Always	79.7 (47)	100.0 (20)	NA	
Often	20.3 (12)	0.0 (0)		
Sometimes	0.0 (0)	0.0 (0)		
Rarely	0.0 (0)	0.0 (0)		
Ask				
Always	37.3 (22)	60.0 (12)	0.08	
Often	59.3 (35)	40.0 (8)		
Sometimes	3.4 (2)	0.0 (0)		
Rarely	0.0 (0)	0.0 (0)		
Listen				
Always	69.5 (41)	65.0 (13)	0.71	
Often	27.1 (16)	30.0 (6)		
Sometimes	3.4 (2)	5.0 (1)		
Rarely	0.0 (0)	0.0 (0)		
Identify				
Always	23.7 (14)	45.0 (9)	0.08	
Often	59.3 (35)	45.0 (9)		
Sometimes	15.3 (9)	5.0 (1)		
Rarely	1.7 (1)	5.0 (1)		
Discuss				
Always	32.2 (19)	50.0 (10)	0.16	
Often	37.3 (22)	35.0 (7)		
Sometimes	27.1 (16)	10.0 (2)		
Rarely	3.4 (2)	5.0 (1)		
Recommend				
Always	33.9 (20)	65.0 (13)	0.02	
Often	44.1 (26)	20.0 (4)		
Sometimes	18.6 (11)	15.0 (3)		
Rarely	3.4 (2)	0.0 (0)		
Agree				
Always	30.5 (18)	40.0 (8)	0.44	
Often	49.2 (29)	45.0 (9)		
Sometimes	17.0 (10)	10.0 (2)		
Rarely	3.4 (2)	5.0 (1)		
Appointment				
Always	35.6 (21)	45.0 (9)	0.46	
Often	44.1 (26)	40.0 (8)		
Sometimes	20.3 (12)	10.0 (2)		
Rarely	0.0 (0)	5.0 (1)		

Note. FCHVs: female community health volunteers; FS: field supervisors; NA: not applicable.

(identify, discuss, agree, and appoint). For nearly all the steps in the GALIDRAA process, the prevalence among FSs of reporting to always engage in the practice was higher than among the FCHVs, but the difference was only significant (P < 0.05) between the percentage who always recommend a doable solution to the problem (FCHV: 34%; FSs: 65%; P: 0.02). Two other differences were also notable, given their role in making sure the counselling is personalized and responsive, rather than didactic: asking the mother about problems (FCHV:

37%; FSs: 60%; *P*: 0.08) and identifying causes of the problem (FCHV: 24%; FSs: 45%; *P*: 0.08).

During the shadowing of FCHVs, variation was found among adherence to the eight GALIDRAA steps. Some steps (listen, discuss, and agree) were rarely applied, whereas other steps (ask and recommend) were nearly always applied. Additionally, some GALIDRAA steps, such as greet and identify, were commonly done in the way as taught during training, whereas other steps, such as ask, recommend, and appoint, were done but not usually in the manner that was taught during trainings. For example, the FCHVs would commonly ask multiple questions in a row about the well-being of the mother and child, and they would usually ask closed-ended questions. These practices were discouraged in the training because they create little space for discussion and solution-seeking engagements between the mother and the FLWs. The FCHVs often identified a problem by assessing the mother's current situation but skipped the next GALIDRAA step, which is discussing the problem. FCHVs would tend to move directly to recommendations and often provide multiple generic recommendations, some related and some not to the specific topic being discussed by the mother, as shown in the example below.

FCHV: Do you eat Dalia [cereal]?

Mother: No, I do not like to eat it.

FCHV: Which vegetable leaves do you eat?

Mother: I prefer the leaves of Palak [spinach]. I eat it three or four

times per week.

FCHV: Do not work more and take care of yourself. Eat good and

nutritious food in time. Do not forget to go for the regular

pregnancy check-ups.

(Shadowing, FCHV, Darchula, Eyarkot)

3.3 Use of the GALIDRAA method

During the FGDs, FCHVs also highlighted how they conducted their work, and the norm seemed to be applying a didactic style rather than engaging in conversation with mothers: "While we go for home visits, we say 'Namaste! Is anyone home?' When they come out, we sit with them for a while and give all the information to them properly" (FCHV, FGD, Rupandehi, Majhgawa). It seemed as if the FCHVs perceived interactions with mothers to be meant for passing on as many messages as possible within a short time frame. FCHVs described home visits as an opportunity to educate mothers, rather than to engage in a counselling session or a discussion: "We go there and ask the problems and we say the things that we know" (FCHV, FGD, Syangja, Arukharka). FCHVs seemed to have a rich knowledge base, but they tended not to focus on the reason behind or the difficulties mothers and households may be facing with changing suboptimal practices. FCHVs rarely asked mothers to agree with the presented solutions, meaning the mother had little input in how the practice should be tackled. Finally, FCHVs were observed to normally set an appointment with a mother by saying they would return soon but rarely making a specific agreement with the mother regarding either the date and time of the return visit or what the topic of the follow-up would be.

During the shadowing of *Suaahara* FSs, we found a much more divided picture than among the FCHVs, where some FSs seemed to

naturally use the GALIDRAA method, whereas others followed very similar patterns to the ways FCHVs engaged with the mothers. The FSs commonly greeted the mothers before explaining the purpose of their visit. The FSs would patiently listen to the mother's difficulties with nutrition practices. The FSs often identified the topic of conversation, which would vary according to the situation, such as the age of the child, which influences which infant and young child feeding practice is most important at that time. Sometimes, the FSs would make statements regarding poor nutrition practices, which seemed to blame the mother, rather than engaging with her to identify and discuss ways to improve the issue. One example relates to a mother–FSs interaction on child feeding, where it seemed the mother faced an obstacle with providing the child with optimal foods. The FSs did not attempt to identify the underlying issue or discuss ways to tackle the obstacle, as noted in the example.

FSs: How are you preparing and feeding that food?

Mother: I am feeding only porridge [lito: special kind of food

prepared for child with ground grains and cereals].

FSs: We have been telling you repeatedly to give the additional

foods to this child, what other nutritious food are you

feeding?

Mother: I feed the porridge, cooking it in ghee.

(Shadowing, FSs, Syangja, Arukharka)

In the FGDs, the FSs highlighted that maternal nutrition cannot improve without including the whole family in the process, as the household hierarchy would often control the portion sizes of the meal between family members. FSs would frequently try to reach agreement with mothers on how to go about changing a suboptimal practice. Agreements to help the mothers during pregnancy or in child care were made with the family as well, as FSs engaged various family members in the counselling process. Some FSs would ask for the mother's commitment to a new practice by agreeing on improvements the FSs wishes to see the next time she visits.

3.4 | Use of behaviour change materials

Job aids and behaviour change materials, such as posters, picture booklets, and a child feeding counselling wheel, were used by the FSs to ensure that the discussions were relevant. The FSs used an integrated home visit checklist, and after completing this, they would use various materials to counsel mothers and family members. FSs tended to give recommendations because of thorough discussion, and they often included not only the mother but the whole family when thinking through solutions. FCHVs reported during FGDs that they use posters and other pictorial materials during interactions with beneficiaries. However, during shadowing, none of the FCHVs were found using these materials during home visits.

3.5 | Facilitators to applying GALIDRAA

In the FGD, both *Suaahara* FSs and FCHVs pointed out that mothers were more open to discussion and speaking freely when no one else was present during the interaction. In the presence of elders or other family members, mothers tended to be more uncomfortable and

hesitant to discuss problems, especially related to sensitive topics such as family planning. The FSs noted that in the absence of other people, mothers are more willing to state health problems they are having.

3.6 | Usefulness of training

Lastly, in the FGD, the FSs stated that they found the GALIDRAA training to be helpful in developing their counselling techniques. They found it to be a useful and systematic guideline, demonstrated by the following quote: "... how the training has helped, we did not know the procedures how to talk to mothers during home visits but after the training we came to know which part of the 'GALIDRAA' we have to implement like, how we can meet a mother in a 'systematic' way" (FSs, FGD, Sindhupalchowk, Bhotechaur).

4 | DISCUSSION AND CONCLUSION

GALIDRAA, an IPC method, is increasingly being adapted globally in programmes to improve health and nutrition-related behaviours. Diverting from a teacher-student approach, FLWs using GALIDRAA are expected to create a mutual relationship with the beneficiary before identifying a potentially undesirable behaviour and then to collaborate with the beneficiary to help the individual realize the need for change and think through options. In an assessment conducted 2 years after Suaahara trained their own FSs and government FLWs on this method, we found variation among both FCHVs and Suaahara FS in adherence to each of the eight GALIDRAA steps, with some being followed more often than others. Furthermore, we found variation in the quality of following each step, operationalized as whether the step was being adhered to in the way it was taught during the training. As might be expected, given their higher education levels, the quantitative and qualitative findings both indicated that the GALIDRAA steps are more systematically adhered to by FSs, in comparison with FCHVs. However, neither group of FLWs adheres to each step in all counselling interactions. Finally, in the FGDs, the FLWs acknowledged the benefits of the GALIDRAA trainings to their own understanding of counselling and their ability to perform their work activities. This suggests that reception to increased training would be positive and could perhaps strengthen the health and nutrition behaviour outcomes by improving the skills of FLWs.

When assessing adherence to GALIDRAA among FLWs, the first question asked was whether the basic steps were followed. Variation was seen among both types of FLWs. Although nearly all FCHVs and FSs reported greeting and most reported asking the mother about obstacles, some of the steps to make the counselling more personalized and discussion-based, such as jointly identifying solutions and setting up a follow-up appointment, were not reported to be done as regularly. This suggests that some GALIDRAA steps are more natural or easier for FLWs, at least in this context, to adopt than other steps. We hypothesize that being raised in a mostly didactic education system in South Asia may contribute to the challenges in adopting less hierarchical methods of engagement, especially when the FLWs view themselves as having greater knowledge on a specific topic than the mothers. The finding that some FSs were using a checklist for

GALIDRAA as part of their normal job routine and others not engaging in the steps or using the checklist highlights the need for monitoring of programme FLWs to ensure that methods and approaches on which they have been trained are followed during implementation.

The second component of the research investigated whether the GALIDRAA steps that were followed were done so with high quality and as per the training. This is important because the way in which counselling is done may influence how receptive the individual is to the suggestions and counselling recommendations being made by the FLWs. A greater number of FSs followed the appropriate GALIDRAA techniques than FCHVs, and this may be due to age, education, caste/ethnicity, or wealth differences. In our sample, the FSs were younger and more educated than the FCHVs, which may influence their ability to learn and adapt new techniques and approaches to fieldwork. Furthermore, exposure to training in terms of when it was last received and intensity of training may have influenced the uptake of new counselling methods. FS reported having been exposed to more trainings than FCHVs, particularly from *Suaahara*.

Another potential reason for differences between FCHVs and FSs may be the amount of time each one has to devote to counselling, given other roles and responsibilities. FCHVs, who are not explicitly required to engage in home visits, have multiple community roles and are being used by many health and nutrition programmes in Nepal, which may limit their ability to fully commit to GALIDRAA as they have multiple responsibilities. Furthermore, the dialogue in the FGDs showed that FCHVs view themselves in a hierarchical position as educators and information providers, rather than in a position to facilitate truly egalitarian open dialogue. Finally, as FCHVs have been community health leaders in Nepal since the 1980s (Panday, Bissell, Teijlingen, & Simkhada, 2017) and Suaahara FSs are new FLWs, it could be that it is easier to adapt the GALIDRAA approach than to replace old habits with this new method. We postulate that most, if not all, FS were trained for the first time by Suaahara, whereas FCHVs have been trained in different counselling approaches by different programmes for several decades. For example, the Nepal Family Health Division trained FCHVs in the GATHER, whereas the Child Health Division used GALIDRAA. Although the key point of both is to listen to mothers, provide them with accurate information/options, and follow-up later, training in various methods can be confusing to the FLW and also make it challenging to follow-up and assess implementation of one specific technique.

Finally, improving the quality of counselling at the household level is a major concern for programmes designed to change behaviour. For example, the FCHVs use of close-ended questions and skipping essential GALIDRAA steps likely prevented opportunities for the mother to discuss her health concerns. Similarly, the provision of generic information and recommendations rather than genuine troubleshooting with the mother to understand barriers and facilitators is a missed opportunity for achieving true behaviour change. Some FLWs also deviated from the suggested GALIDRAA counselling format: The use of job aids and materials was inconsistent with FSs and non-existent with FCHVs during home visits as observed during shadowing and may have affected how engaging and persuasive the conversation was with the family regarding behaviour change. The purpose of using the GALIDRAA method is to establish a collaborative environment

between the FLW and the beneficiary that would create opportunities for change. Current practice and inadequate adherence to the method highlight the need for improvement in training (e.g., quality and number of days) of FLWs in nutrition counselling and the need for a substantial post-training follow-up plan including coaching, mentoring, and supportive supervision. This is a major challenge for implementation of SBCC programmes globally: Without FLWs personalizing the counselling, behaviour change efforts may not fully realize their potential particularly in settings in which lack of knowledge is not the only or primary barrier.

A key strength of this study is the combination of qualitative and quantitative data collection and analysis methods to examine not only how FLWs report their adherence to the GALIDRAA method, but also how they discuss it among themselves in FGDs and observation data on how they engaged in each step. The relatively small sample size in this study could be one reason for the lack of significant findings and could be a limitation to the robust interpretation of the results; this is indeed a reason why the discussion of findings is not limited to those which were deemed significant by P value. However, given the limited nature of existing literature surrounding health worker training in counselling methods, this study is a first step in examining the benefits and shortfalls of training and counselling guidelines such as GALIDRAA. This analysis has generated several hypotheses regarding why some FLWs adopted the GALIDRAA approach and others did not; future studies should further investigate these hypotheses in more rigorous ways to further our understanding of how to improve health and nutrition counselling, particularly in low-income countries. Future studies should explore positive deviance analysis to understand why some FLWs who understand the principles of the approach adopt it and others do not. Future studies should include larger cohorts of FLWs and assess other explanatory factors that drive the quality of health worker-beneficiary interactions. Finally, it would be ideal to have a more rigorous study, perhaps a trial to be able to explore how effective the GALIDRAA counselling approach is, in comparison with other less-personalized counselling approaches, in changing household nutrition behaviours and in turn improving key outcomes and nutritional status.

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CONFLICTS OF INTEREST

All authors are full-time employees of *Suaahara* or worked as interns or consultants for *Suaahara* during the preparation of this manuscript.

AUTHOR CONTRIBUTIONS

KC designed the study and conceptualized the manuscript, guided the analysis, and supported writing of multiple drafts. SS drafted the results and discussion sections of the manuscript. CK conducted the descriptive analysis and drafted the background and methods sections. FS supported the literature review on GALIDRAA and nutrition counselling, supported interpretation of findings based on her position on the *Suaahara* nutrition team, and drafted the abstract. NS supported interpretation of findings based on his position as a field staff during *Suaahara* I, implementing the approach. SM was involved in the qualitative design, data collection, translation, transcription, and analysis and supported drafting of the qualitative methods and results and discussion sections. All authors reviewed and edited multiple drafts and the final manuscript and agreed on submission to this journal for publication.

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