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Attitude and Social Support Associated with Weekly Iron-Folic Acid Adherence Among Adolescent Girls in Badung, Bali, Indonesia

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ABSTRACT

Anemia among adolescent girls in Indonesia remains a significant public health problem. Attitude and social support may influence the success of anemia prevention through adherence to weekly iron–folic acid (IFA) supplementation. This cross-sectional study analyzed the association between attitude, family support, peer support, school support, and adherence to weekly IFA supplementation among adolescent girls in one junior high school in Badung, Bali, Indonesia. All eligible adolescent girls were included in the study (n = 141), and data were collected using a structured questionnaire. Univariate analysis was used to describe respondent characteristics, while bivariate analysis using the Chi-square test and Fisher's exact test was performed to examine associations between variables. A total of 83.0% of respondents were adherent to weekly IFA supplementation. Among all respondents, 45.4% had a positive attitude, 13.5% had family support, 72.3% had peer support, and 95.7% had school support. School support was significantly associated with adherence to weekly IFA supplementation (p = 0.001), and adolescent girls who received school support had higher odds of adherence than those who did not (OR = 30.5; 95% CI: 3.4–276.2). These findings indicate that school support plays an important role in improving adherence to weekly IFA supplementation among adolescent girls. Strengthening the role of educational institutions through structured supervision and health education may enhance adherence and support anemia prevention programs in this population.

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ABSTRAK

Anemia pada remaja putri di Indonesia masih merupakan masalah kesehatan masyarakat yang penting. Sikap dan dukungan sosial diduga memengaruhi keberhasilan pencegahan anemia melalui kepatuhan konsumsi tablet tambah darah (TTD) mingguan. Penelitian ini bertujuan untuk menganalisis hubungan antara sikap, dukungan keluarga, dukungan teman sebaya, dukungan sekolah, dan kepatuhan konsumsi TTD mingguan pada remaja putri di salah satu sekolah menengah pertama di Badung, Bali, Indonesia. Penelitian ini menggunakan desain cross-sectional dengan melibatkan seluruh remaja putri yang memenuhi kriteria di sekolah tersebut (n = 141). Data dikumpulkan menggunakan kuesioner terstruktur. Analisis univariat dilakukan untuk mendeskripsikan karakteristik responden, sedangkan analisis bivariat menggunakan uji Chi-square dan Fisher's exact test dilakukan untuk menilai hubungan antarvariabel. Sebanyak 83,0% responden patuh mengonsumsi TTD mingguan. Dari seluruh responden, 45,4% memiliki sikap positif, 13,5% memiliki dukungan keluarga, 72,3% memiliki dukungan teman sebaya, dan 95,7% memiliki dukungan sekolah. Dukungan sekolah berhubungan signifikan dengan kepatuhan konsumsi TTD mingguan (p = 0,001), dan remaja putri yang memperoleh dukungan sekolah memiliki peluang kepatuhan yang lebih tinggi dibandingkan mereka yang tidak memperoleh dukungan sekolah (OR = 30,5; 95% CI: 3,4–276,2). Temuan ini menunjukkan bahwa dukungan sekolah memiliki peran penting dalam meningkatkan kepatuhan konsumsi TTD mingguan pada remaja putri. Penguatan peran institusi pendidikan melalui pengawasan terstruktur dan edukasi kesehatan dapat meningkatkan kepatuhan serta mendukung program pencegahan anemia pada kelompok ini

Kata Kunci: Anemia; Sikap; Studi potong lintang; Sekolah Menengah Pertama; Tablet tambah darah mingguan

1. Introduction

Adolescence is a critical period of rapid growth and development that requires adequate nutritional intake to support physical, cognitive, and reproductive maturation. Insufficient nutrient intake during this stage may result in several health problems, one of the most important being iron deficiency anemia. Anemia remains a major public health problem among women of reproductive age and adolescent girls globally and in developing countries, including Indonesia [1],[2]. In Indonesia, approximately 32% of adolescents are reported to experience anemia [3]. This condition may impair cognitive performance, reduce immune function and productivity, and increase future maternal risks, including low birth weight, preterm birth, and stunting when affected adolescent girls later become pregnant [4],[5],[6],[7].

To address this problem, the Indonesian government has implemented a weekly iron–folic acid (IFA) supplementation program for adolescent girls and women of reproductive age. According to national guidelines, each tablet contains 60 mg of iron and 400 mcg of folic acid [8]. Although the program has achieved high distribution coverage, adherence to weekly IFA supplementation remains suboptimal. Bali Province has been reported to have one of the highest coverage rates in Indonesia, yet regular consumption among adolescent girls remains low [3],[9]. This discrepancy suggests that high program coverage does not necessarily translate into adequate adherence, thereby potentially limiting the effectiveness of anemia prevention efforts.

Adherence to weekly IFA supplementation may be influenced not only by individual factors, but also by social and environmental factors. Attitude has been

reported as an important determinant of health-related behavior, including adherence to iron tablet consumption among adolescent girls [10],[11],[12]. In addition, social support may strengthen motivation, reinforce healthy routines, and reduce behavioral barriers. Previous studies have demonstrated significant associations between family support and medication adherence [13],[14],[15],[16],[17], while peer support has also been reported to influence adherence behavior in adolescents and other patient groups [18],[19]. However, evidence specifically examining the role of social support in adherence to weekly IFA supplementation among adolescent girls in areas with high program coverage but low adherence remains limited.

This issue is particularly relevant in Badung, Bali. Regional data indicate that the average age at menarche in Bali is approximately 13 years, with the youngest reported age in Badung being 12 years, suggesting earlier menstrual onset and potentially longer exposure to anemia risk [9]. In addition, the coverage of weekly IFA supplementation among adolescent girls in Badung is relatively high [9]. These contextual characteristics make Badung an important setting for examining why adherence remains inadequate despite strong program reach. Therefore, this study aimed to analyze the association between attitude, family support, peer support, school support, and adherence to weekly IFA supplementation among adolescent girls in Badung, Bali, Indonesia.

2. Methods

Study Design and Setting

This study used an observational analytic design with a cross-sectional survey approach. The study was conducted in one junior high school in Badung, Bali, Indonesia.

Population, Sample Size, and Sampling Technique

The study population comprised all adolescent girls enrolled in the selected junior high school. A total sampling technique was applied, and all eligible students were included in the study. The final sample consisted of 141 adolescent girls.

Eligibility Criteria

The inclusion criteria were adolescent girls who were actively attending school and had received weekly iron–folic acid (IFA) supplementation tablets through the school-based program. Students who withdrew from the study were excluded. If a student was absent during data collection, the researcher contacted the student through the homeroom teacher to request participation and arrange a follow-up schedule. Contact was attempted up to three times. Students who did not respond or who initially agreed but did not complete participation were categorized as excluded.

Variables and Operational Definitions

The independent variables were attitude toward weekly IFA supplementation and social support, which included family support, peer support, and school support. The dependent variable was adherence to weekly IFA supplementation.

Attitude was measured using 16 Likert-scale items with four response categories. Positively worded items were scored as strongly agree = 4, agree = 3, disagree = 2, and strongly disagree = 1, whereas negatively worded items were reverse-scored. Total attitude scores were summed for each respondent, and the sample mean score was used as the cut-off point. Respondents with a total score greater than or equal to the mean were categorized as having a positive attitude, whereas those with a total score below the mean were categorized as having a negative attitude.

Family support was assessed using four response options. Responses of "always" and "often" were coded as 1, whereas "ever" and "never" were coded as 0. Peer support and school support were assessed using dichotomous responses, coded as

yes = 1 and no = 0. For each social support domain, total scores were converted into percentages of the maximum possible score and categorized as low support (<50%) or adequate support (≥50%).

Adherence to weekly IFA supplementation was defined as regular consumption of one IFA tablet per week during the previous three months. Respondents were categorized as adherent if they reported regular weekly consumption and non-adherent if they did not.

Study Instruments and Measurement

Data were collected using a structured questionnaire that had undergone face validity assessment by an expert panel in community pharmacy. The questionnaire consisted of four sections covering respondent characteristics, attitude toward weekly IFA supplementation, social support, and adherence. Respondent characteristics included age and parental income. The attitude section contained 16 items, while the social support section assessed support from family, peers, and school staff or teachers.

Data Collection Procedures

Data collection was conducted after permission had been obtained from the school principal. Students were gathered in the classroom by their homeroom teachers, and the researcher explained the purpose and procedures of the study before questionnaire administration. Participation was voluntary and unrelated to academic assessment. Respondents were informed that all data would be analyzed in aggregate form and would not identify individual participants. Students who agreed to participate provided written informed consent and then completed the questionnaire.

Data Analysis

All questionnaire responses were entered and analyzed using Statistical Product and Service Solutions (SPSS) version 26 (IBM Corp., Armonk, NY, USA). Categorical variables were summarized as frequencies and percentages. Bivariate analysis was performed to examine the associations between attitude, family support, peer support, school support, and adherence to weekly IFA supplementation. The Chi-square test was used for variables that met the expected cell count assumption, whereas Fisher's exact test was applied when the assumption was not met. In this study, Fisher's exact test was used for school support because one comparison category contained a small number of respondents. Odds ratios (ORs) and 95% confidence intervals (CIs) were calculated from 2 × 2 contingency tables to estimate the strength of association. A p-value of less than 0.05 was considered statistically significant.

Ethical Considerations

This study received ethical approval from the Ethics Committee of the University of Surabaya, Indonesia (No. 357/KE/III/2024).

3. Results and Discussion

Participant Characteristics

A total of 141 adolescent girls participated in this study, resulting in a response rate of 100%. The respondents were aged 12–15 years, with the largest proportion being 13 years old (47.5%), followed by 14 years (30.5%), 12 years (20.6%), and 15 years (1.4%). In terms of socioeconomic background, 58.2% of respondents had parental income above the regional minimum wage (RMW), while 41.8% were in the lower-income category. These findings indicate that the study population was predominantly composed of early adolescents with a relatively favorable household economic background.

The predominance of respondents with parental income above the RMW differs from previous studies, which reported that many adolescent girls came from lower

socioeconomic backgrounds or households with income below the regional minimum wage [7],[20]. This difference may reflect the socioeconomic context of Badung, which is one of the main economic and tourism centers in Bali and has the highest regional minimum wage in the province [21]. Accordingly, the relatively stronger household economic profile observed in this study may be associated with broader employment opportunities and higher regional income levels in Badung.

Table 1. Respondents' Characteristics, Attitudes, Social Support, and Adherence

Respondent Data		Total (n)	Percentage (%)
Respondent Age	12	29	20.6
	13	67	47.5
	14	43	30.5
	15	2	1.4
Parental Income	≥ RMW	82	58.2
	< RMW	59	41.8
Attitude	Positive	64	45.4
	Negative	77	54.6
Social Support			
Family	adequate support	19	13.5
	low support	122	86.5
Peers	adequate support	102	72.3
	low support	39	27.7
School	adequate support	135	95.7
	low support	6	4.3
Adherence	Adherent	117	83.0
	Non-adherent	24	17.0

Note: RMW (Regional Minimum Wage)

Adherence to Weekly IFA Supplementation

As presented in **Table 1**, 117 of 141 respondents (83.0%) were categorized as adherent to weekly iron–folic acid (IFA) supplementation, while 24 respondents (17.0%) were categorized as non-adherent. These findings indicate that the majority of adolescent girls in the study setting reported regular weekly IFA consumption during the previous three months. The relatively high proportion of adherence observed in this study may reflect the implementation of the school-based IFA supplementation program in the selected setting.

This finding should, however, be interpreted within the broader programmatic context. National and provincial reports have shown that anemia remains a major public health problem among Indonesian adolescents, while the government has implemented weekly IFA supplementation as part of anemia prevention efforts among adolescent girls [3],[8]. Although Bali and Badung have been reported to have relatively high program coverage, adherence to regular tablet consumption may still vary across settings [3],[9]. Therefore, the relatively high adherence found in this study should not be interpreted as representing all adolescent girls in the region, but rather as reflecting the specific context of the school included in this study.

Attitude Toward Weekly IFA Supplementation

As presented in **Table 1**, 64 of 141 respondents (45.4%) were categorized as having a positive attitude toward weekly iron–folic acid (IFA) supplementation, whereas 77 respondents (54.6%) were categorized as having a negative attitude. A more

detailed distribution of respondents' attitudes across the 16 questionnaire items is presented in **Table 2**. All negatively worded items were reverse-scored prior to analysis to ensure that higher scores consistently reflected more favorable attitudes. Overall, the mean score per item ranged from 2.23 to 3.39 on a four-point Likert scale, corresponding to 55.8% to 84.8% of the maximum possible score.

Table 2. Respondents' Attitudes Toward Weekly Iron–Folic Acid (IFA) Supplementation

No.	Statement	Total score	Mean score/item	% of maximum score
1	I know that I need to take iron supplementation tablets.	463	3.28	82.0
2	In my opinion, iron supplementation tablets are not beneficial for adolescent girls' health.	433	3.07	76.7
3	Anemia can endanger my health.	451	3.20	80.0
4	I feel worried if I develop anemia.	478	3.39	84.8
5	If I experience symptoms of anemia (the 5 L: fatigue, tiredness, weakness, lethargy, and lack of energy), I will remain silent.	411	2.92	73.0
6	If I know that my hemoglobin (Hb) level is < 12 g/dL, indicating anemia, then I should take iron supplementation tablets.	459	3.26	81.5
7	My concentration in studying will be disturbed if I develop anemia.	448	3.18	79.5
8	In my opinion, only adults need to take iron supplementation tablets.	388	2.75	68.8
9	I will take iron supplementation tablets before going to bed to avoid nausea.	314	2.23	55.8
10	I do not need to eat a lot of vegetables and fruits.	428	3.04	76.0
11	I immediately feel nausea and vomiting after taking iron supplementation tablets.	407	2.89	72.3
12	I do not like taking iron supplementation tablets because of their fishy smell.	399	2.83	70.8

13	I become less motivated to study if I suffer from anemia.	395	2.80	70.0
14	I feel healthier after taking iron supplementation tablets.	430	3.05	76.3
15	If I am given iron supplementation tablets, I will take them.	454	3.22	80.5
16	To prevent anemia, I need to consume foods that contain sufficient protein.	469	3.33	83.3

Note: *All negatively worded items were reverse-scored prior to analysis. Higher mean scores indicate more favorable attitudes toward weekly IFA supplementation.*

As shown in **Table 2**, the highest mean score was observed for the statement *"I feel worried if I develop anemia"* (mean = 3.39; 84.8%), followed by *"To prevent anemia, I need to consume foods that contain sufficient protein"* (mean = 3.33; 83.3%) and *"I know that I need to take iron supplementation tablets"* (mean = 3.28; 82.0%). These findings indicate that respondents generally had a relatively good awareness of anemia risk and the importance of preventive efforts, including adequate nutrition and weekly IFA supplementation.

However, several items in **Table 2** still showed comparatively lower mean scores, particularly *"I will take iron supplementation tablets before going to bed to avoid nausea"* (mean = 2.23; 55.8%), *"In my opinion, only adults need to take iron supplementation tablets"* (mean = 2.75; 68.8%), and *"I do not like taking iron supplementation tablets because of their fishy smell"* (mean = 2.83; 70.8%). Although these items were reverse-scored, their relatively lower values suggest that practical barriers, misconceptions, and unpleasant sensory perceptions toward tablet consumption may still persist among some respondents. Thus, while respondents appeared to have acceptable awareness regarding anemia and its prevention, perceived barriers related to tablet use may still weaken the development of more favorable attitudes toward weekly IFA supplementation.

This descriptive pattern is consistent with previous studies showing that attitude remains an important factor in adolescent girls' responses to iron tablet consumption and that knowledge, beliefs, and perceived benefits contribute to the formation of more favorable attitudes [10],[11],[12]. At the same time, earlier studies have also indicated that negative perceptions, perceived side effects, and contextual barriers may limit the translation of favorable attitudes into actual adherence behavior [22],[23],[35],[36]. Therefore, improving awareness alone may not be sufficient; educational interventions should also address misconceptions, anticipated side effects, and practical barriers related to tablet consumption in order to strengthen more favorable attitudes toward weekly IFA supplementation.

Social Support for Weekly IFA Supplementation

As presented in **Table 1**, the distribution of social support for weekly iron–folic acid (IFA) supplementation varied across domains. Only 19 respondents (13.5%) reported adequate family support, while 122 respondents (86.5%) were categorized as having low family support. In contrast, 102 respondents (72.3%) had adequate peer support and 39 respondents (27.7%) had low peer support. School support showed the highest proportion, with 135 respondents (95.7%) categorized as having adequate

support and only 6 respondents (4.3%) categorized as having low support. These findings indicate that school constituted the most prominent source of support for weekly IFA supplementation among respondents, followed by peers, whereas family support was comparatively limited.

This pattern suggests that the social environment surrounding weekly IFA supplementation in this study was more strongly reinforced within the school setting than at home. The relatively low proportion of adequate family support may indicate limited supervision, encouragement, or communication regarding regular tablet consumption in the household context. By contrast, the high levels of peer and school support suggest that adolescent girls were more likely to encounter reinforcement for weekly IFA supplementation through their immediate educational and social environment. Previous studies have similarly shown that family support, teacher support, and peer support may contribute to adolescents' adherence to iron tablet consumption and other health-related behaviors [26],[27],[28],[37],[38]. In particular, school-based support has been reported as an important enabling factor because educational institutions can provide structured supervision, reminders, and health information in a more consistent manner than informal support systems.

Overall, the descriptive findings in this study indicate that support for weekly IFA supplementation was not evenly distributed across social domains. The dominance of school support and the relatively high level of peer support may reflect the central role of the school environment in shaping adolescent health practices, whereas the lower level of family support suggests that support at the household level may not yet be optimal. These differences are important to consider in interpreting adherence behavior and in designing interventions that involve not only schools, but also families and peer networks as part of a broader strategy to strengthen weekly IFA supplementation among adolescent girls.

Bivariate Associations with Adherence to Weekly IFA Supplementation

As shown in **Table 3**, no statistically significant association was found between attitude and adherence to weekly iron–folic acid (IFA) supplementation ($p = 0.080$). Likewise, family support ($p = 0.530$) and peer support ($p = 0.316$) were not significantly associated with adherence. In contrast, school support was significantly associated with adherence to weekly IFA supplementation ($p = 0.001$). Because the number of respondents in the low school-support category was very small, the association between school support and adherence was analyzed using Fisher's exact test. Respondents who received adequate school support had substantially higher odds of being adherent than those with low school support (OR = 30.53; 95% CI: 3.37–276.21).

A more detailed inspection of **Table 3** shows that 57 of 64 respondents with a positive attitude (89.1%) were adherent, compared with 60 of 77 respondents with a negative attitude (77.9%). For family support, 17 of 19 respondents with adequate support (89.5%) were adherent, compared with 100 of 122 respondents with low support (82.0%). For peer support, adherence was observed in 87 of 102 respondents with adequate support (85.3%) and 30 of 39 respondents with low support (76.9%). The most pronounced contrast was found for school support: 116 of 135 respondents with adequate school support (85.9%) were adherent, whereas only 1 of 6 respondents with low school support (20.0%) was adherent. These findings indicate that school support was the only factor that showed a statistically meaningful relationship with weekly IFA supplementation adherence in this study.

Table 3. Bivariate Associations with Adherence to Weekly Iron–Folic Acid (IFA) Supplementation

Support variables	Category	Adherent n (%)	Non-adherent n (%)	OR	95% CI	p-value
Attitude	Positive	57 (89.1)	7 (10.9)	2.31	0.88–6.07	0.080
	Negative	60 (77.9)	17 (22.1)	Ref	–	–
Family support	Adequate	17 (89.5)	2 (10.5)	1.87	0.41–8.59	0.530
	Low	100 (82.0)	22 (18.0)	Ref	–	–
Peer support	Adequate	87 (85.3)	15 (14.7)	1.74	0.69–4.39	0.316
	Low	30 (76.9)	9 (23.1)	Ref	–	–
School support	Adequate	116 (85.9)	19 (14.1)	30.53	3.37–276.21	0.001*
	Low	1 (20.0)	5 (80.0)	Ref	–	–

Note: *Percentages are row-based. Chi-square test was used for attitude, family support, and peer support. Fisher's exact test was used for school support because one comparison category contained a small number of respondents. Statistically significant at* $p < 0.05$.

The absence of statistically significant associations for attitude, family support, and peer support suggests that adherence to weekly IFA supplementation may not be determined by these factors alone. This pattern is consistent with previous studies reporting that attitude does not always translate directly into adherence behavior, particularly when adherence is also shaped by perceived side effects, individual motivation, and contextual barriers [22],[23],[35],[36]. Similarly, although family and peer support are conceptually important in adolescent health behavior, their effects may be inconsistent across settings and may depend on the intensity of supervision and the degree of behavioral reinforcement available in daily life [37],[38]. In the present study, the influence of family and peer support may have been less apparent because tablet consumption was embedded within a school-based program rather than managed primarily at home or within peer networks.

By contrast, the significant association between school support and adherence is in line with previous evidence showing that teacher support and school-based supervision can strengthen adherence to iron tablet consumption among adolescent girls [26],[27],[28]. Schools provide a more structured setting for tablet distribution, reminders, direct supervision, and repeated health education, which may reduce forgetfulness and improve routine compliance. Nevertheless, the very wide confidence interval for the school-support odds ratio indicates that the magnitude of association should be interpreted cautiously, as the estimate may be affected by the small number of respondents in the low school-support category. Even so, the direction of the association remains clear and supports the importance of educational institutions as a key setting for improving weekly IFA supplementation adherence among adolescent girls.

Interpretation of Key Findings

The present findings indicate that school support may play a more decisive role in weekly iron–folic acid (IFA) supplementation adherence than other psychosocial factors assessed in this study. Although attitude, family support, and peer support are

conceptually important in shaping adolescent health behavior, only school support showed a statistically meaningful association with adherence. This pattern suggests that adherence in the present setting may be influenced more strongly by structured and routine institutional reinforcement than by individual perception or informal social encouragement alone. Previous studies have also shown that teacher support and school-based supervision contribute positively to regular iron tablet consumption among adolescent girls [26],[27],[28]. In school-based programs, scheduled tablet distribution, reminders from teachers or school health personnel, direct supervision, and repeated health education may reduce forgetfulness and promote routine compliance, thereby strengthening adherence behavior.

The absence of significant associations for attitude, family support, and peer support should be interpreted cautiously rather than as evidence that these factors are unimportant. Several methodological considerations may have influenced these findings. The attitude variable was categorized using a mean-based cut-off, which may have reduced variability and limited sensitivity in detecting more subtle gradients in attitude. In addition, adherence was measured through self-reported responses, which may be influenced by recall inaccuracy or socially desirable reporting. The present study also did not assess several contextual factors that may influence adherence, such as perceived side effects, access-related barriers, and individual motivation. These unmeasured factors may have attenuated the observed relationships between psychosocial variables and adherence. Similar studies have reported that favorable attitudes do not always translate directly into actual adherence behavior when other barriers remain present [22],[23],[35],[36].

The non-significant findings for family and peer support may also reflect the context in which weekly IFA supplementation was implemented. In this study, tablet consumption was embedded within a school-based program, meaning that supervision and reinforcement may have occurred primarily in the educational setting rather than at home or through peer networks. As a result, family and peer support may have been present conceptually but less influential behaviorally because they were not delivered through a structured or consistently monitored mechanism. Previous studies have nevertheless shown that family and peer support remain relevant to adolescent health behavior, particularly when they provide supervision, encouragement, and reinforcement of healthy routines [24],[37],[38]These findings therefore suggest that school support may function as the most immediate and operationally effective form of support in the present setting, while family and peer support may still contribute indirectly.

From a practical perspective, the findings emphasize the importance of strengthening school-based anemia prevention strategies among adolescent girls. Efforts to improve adherence should not rely solely on increasing awareness, but should also institutionalize regular supervision, teacher reminders, school health unit involvement, and structured health education. At the same time, interventions may be strengthened further by involving families and peers as complementary sources of reinforcement. In this way, adherence to weekly IFA supplementation can be supported not only as an individual health behavior, but also as a routine practice embedded in a supportive educational and social environment.

Limitations of the Study

This study has several limitations that should be considered when interpreting the findings. Because the study was conducted in a single junior high school in Badung,

Bali, the results may not be fully generalizable to adolescent girls in other schools, districts, or socio-demographic settings. In addition, the cross-sectional design does not allow causal inference, so the identified relationships should be interpreted as associations rather than evidence of causality. Adherence was assessed using a self-administered questionnaire and self-reported responses, which may be affected by recall inaccuracy and socially desirable reporting, particularly because weekly iron–folic acid supplementation was implemented within a school-based program. The use of a mean-based cut-off to categorize attitude may also have reduced variability and limited the sensitivity of the analysis to detect more subtle differences in respondents' attitudes. Moreover, several contextual factors that may influence adherence, such as perceived side effects, access-related barriers, individual motivation, and the intensity of parental supervision outside the school setting, were not assessed. Another important limitation is the very small number of respondents in the low school-support category, which may have reduced the precision of the estimated association, as reflected by the wide confidence interval. Nevertheless, despite these limitations, the present study provides an important preliminary basis for future research involving larger and more diverse populations, broader school settings, and more comprehensive measurement of behavioral and contextual determinants of weekly iron–folic acid supplementation adherence among adolescent girls.

4. Conclusion

This study showed that school support was significantly associated with adherence to weekly iron–folic acid (IFA) supplementation among adolescent girls, whereas attitude, family support, and peer support were not significantly associated. These findings indicate that adherence to weekly IFA supplementation in this setting may be influenced more strongly by structured institutional support than by individual or informal social factors alone. Strengthening the role of educational institutions through scheduled tablet distribution, teacher reminders, direct supervision, and structured health education may therefore represent an important strategy to improve adherence and support anemia prevention among adolescent girls. Further studies involving larger and more diverse populations are needed to confirm these findings and to explore additional behavioral and contextual factors that may influence weekly IFA supplementation adherence.

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Conflict of Interest:

The authors declare no conflict of interest related to this study.

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