Child Alcohol Use in Rural Kebeles of Amhara Region: Prevalence, Age of Onset and Association with Health and Behaviour Problems

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Abstract

This study examined the prevalence of child alcohol use, age of onset, differences between alcohol users and non-users in terms of health and behaviour, and association of alcohol use with children health and behaviour problems. A total of 390 children and 390 mothers were participated in the study from Awzet, Yetnora and Zindib Kebeles of Amhara region, Ethiopia. The data were collected through questionnaires. The findings revealed that approximately 82% of the sample children drank alcohol; about 50% of them began alcohol use between the ages of 6 months and 12 years; statistically significant difference was obtained between children who frequently drink alcohol and who never drink alcohol in terms of educational activities, social interaction, somatic problems, anxiety and depression, and sleep problems. The standardized beta result also revealed statistically significant association between children's report of alcohol use and their health and behaviour problems. On the opposite, no statistically significant difference was obtained between alcohol users and non-users in relation to aggressive and destructive behaviours, and no association was obtained between children's report of alcohol use and mothers' report of their children's destructive and aggressive behaviours. Finally, it is concluded that majority of children who live in the study areas experiment alcohol at early age which may place them at risk of developing various health and behaviour problems. Therefore, it is recommended that effective educational programs need to be designed to aware the rural community about the negative consequence of early alcohol use and protect children from harm.

Keywords: children, alcohol use, prevalence, age of onset, association, rural kebeles

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Introduction

Alcohol use is legally prohibited for young children and adolescents in many countries though the legal age to begin alcohol drink may vary from country to country. United States and other 11 countries set minimum legal drinking age of 21 years; 116 countries including Ethiopia set minimum legal drinking age of 18 or 19 years; 20 countries set minimum legal drinking age of 16 -17 years, 2 countries set 10 -15 years, 19 countries have no legal drinking age, and 16 countries ban alcohol drinking at all (ProCon.org, 2018). Even if most countries legally prohibit alcohol drink at younger age, it is found that children start alcohol drinking before legal age (Éduc'alcool, 2009; Newbury-Birch et al., 2009).

It is well documented that frequent alcohol use can negatively affect human health (World Health Organization [WHO], 2009). Alcohol abuse can affect cognitive functioning, liver health, and the maturation process of reproductive organs among adolescents (Alert, 2006; Richter & Richter, 2001). It is also found that over drinking may cause sudden death. Citing previous studies, Wortman and Loftus (1992) described how alcohol use influences human behaviour and in turn leads to death as:

> …when administered slowly and in small dose, alcohol is often regarded as a socially wonder drug. It seems to relax inhibitions and often makes people more gregarious. But, if a person consumes more alcohol, a steady deterioration of all body functions results. Perception becomes distorted, speech begins to slur, and the drinker has trouble controlling simple movements. When blood alcohol reaches a level of 0.3 to 0.4 percent, it severely disrupts activity in the brain's reticular formation, which maintains consciousness, so the person lapses into coma. At a blood alcohol level about 0.5 percent, breathing stops and death occurs (p. 17).

This implies that excessive alcohol use not only leads to short and long-term health problems, but also results in sudden death.

Several studies conclusively link teenage alcohol use to a host of health and social problems, including motor vehicle crashes and deaths, drowning, suicide, homicide (murder), falls, fires, cigarette smoking, illicit (illegal) drug use, early sexual activity, sexually transmitted diseases, rape, unwanted pregnancies, academic failure, school dropout, job difficulties, physical fights, property destruction, delinquency, and troubles with law enforcement authorities (Brody et al., 1998; National Institute on Drug abuse [NIDA], 2003; Newbury-Birch et al, 2009).

In Ethiopia, the prevalence of alcohol use among college and high school students has been investigated by different researchers, and studies show an alarming rate of alcohol consumption among very young adults. For instance, Reda et al.,(2012) conducted a cross-sectional study on alcohol drinking patterns of 1721 high school students (with mean age 16.4) in Eastern Ethiopia. Their findings revealed that 372 (22.2%), which is more than a fifth of the total number of sample students, regularly drink alcohol. Of these, 118 were females and 254 were males.

The prevalence of adolescents' alcohol use even increases at college level. Yismaw and Kebede (2015) examined the prevalence and associated factors of alcohol consumption among 454 college students at Gondar Town, Northwest Ethiopia. The result showed that 48.23 % were regular alcohol consumers, and 26.4 % of the respondents had had alcohol within the previous thirty days. Similarly, a cross-sectional study by Gebremariam et al.(2018) on substance use and associated factors among 695 students of Debre Berhan University revealed that 36.3% of the students were found to be lifetime users of alcohol, and about 17% of students were using alcohol. Perhaps a milder, yet not negligible, prevalence of alcohol use was observed in Jigjiga University. Shiferaw et al. (2017) conducted a cross-sectional study, and based on data collected from 648 undergraduate students, 27.3% of the students consumed alcohol frequently.

Given the fact that college students are often in a higher level of expectation by the society to perform better academically, the presence of such practice in excess among the students makes one wonder whether it could be campus environments that encourage students to use addictive substances, or whether the practice could be worse among adolescents outside college. But what we were curious about in this study is the alcohol use among minors even younger than high school age. While the above studies and similar others assessed the prevalence of alcohol drink among young adults and adolescents, the prevalence of alcohol consumption among minors below age 12 lacks research attention.

Both factory and homebrewed alcohols are consumed for various reasons in Ethiopia. The most commonly consumed homebrewed alcohols are *tela, tej* and *araqie* (Tafere, 2015). The alcoholic content of *tela* varies from 5% to 6%, and of *tej* from 6.98% to 10.9%. These two are usually perceived as harmless social drinks. However, the alcoholic content of *araqie* varies between 30% to almost 50% (WHO, 2004). These drinks are cultural beverages and widely served on festive occasions and at social gatherings.

Children in rural communities of Amahra region grow in environments where they can easily access these home-made beverages (*tela, tej* and *araqie*) in their homes and neighbourhoods. It is also common to observe parents giving these beverages to their young children at early age probably due to lack of knowledge about the dire consequences of early alcohol use since majority of them have limited education. Therefore, how many children are exposed for underage drinking of these beverages and the age of onset of consumption needs research coverage?

Although infants may test alcohol in a small dose, the early experimentation of such types of alcoholic beverage may place them at risk of alcohol addiction and other substance misuses in their later life (Velleman et al.,2005). Studies show that young people who begin drinking in their early teens are substantially more likely to become dependent on alcohol within 10 years than those who begin drinking in their late teens and early 20s (Naik & Kaneda, 2015). Perhaps such onset of early drinking is accountable for increased consumption of alcohol among high school and college students later. But, as mentioned above, early age alcohol use and its consequences on children's health and wellbeing are still not investigated well. This research was therefore designed to address these research gaps.

The objectives of the research were to:

- assess the prevalence of alcohol use (home or factory-made) among children and youth below age 18 in Awuzet, Yetnora and Zindib Kebeles (districts), Amhara rural community, Ethiopia;
- identify the age of onset of alcohol use among children of these rural Kebeles;
- examine whether there are statistically significant differences between alcohol users and non-alcohol users in terms of health and behaviour problems; and
- examine the causal association between alcohol use and children's health and behaviour problems.

Method

Design

A cross-sectional research design with quantitative research approach was used in this study. Data were collected from participants of different ages at a similar time.

Selection Criterion of Research Site

The selection criterion for the site of this study was the community using alcohols for festive and social gatherings and homebrew alcohols such as *tela*, a*raqie* and *tej* as regular cultural beverages. Accordingly, from 11 Zones of the region, North Gondar, South Gondar, East Gojam, West Gojam, Awi, Waghimra, Bahir Dar Special Zone and North Shewa Zones were considered as eligible Zones for sample selection while North Wollo Zone, South Wollo Zone, and Oromia Special Zone were excluded assuming that in these Zones the aforementioned alcohols are less likely used as regular cultural beverages since majority of the dwellers of these Zones are Muslims.

Sample

The target population of this research were children living in three rural *Kebeles* (District) of Amhara region namely Awuzet, Zindibe and Yetnora. The estimated population size of the three *Kebeles* was 12,000. Of this, 390 children and 390 mothers of these children were selected for the study.

Cluster sampling technique was employed to select the participants. To do so, first the above eligible eight Zones were listed and East Gojam, West Gojam, and South Gondar were selected randomly using lottery method; and then from these Zones, Dejene, Jabitenan and Farta woredas were selected respectively using a similar method. From Dejen, Jabitenan, and Farta woredas, Yetnora, Zindib and Awuzet Kebeles were randomly selected respectively. From each Kebele, one primary school; from each primary school, 3 sections (one from grade 5, one from grade 6, and one from grade 7) were randomly selected. Finally, all students of the selected sections and their mothers participated in the study.

Instruments

Children's Questionnaire

Questionnaire which consists of 49 items in three sections was administered to children. The first section of the questionnaire consists of 12 items assessing demographic information and initial data of alcohol use. It was constructed in the form of multiple choices, yes/no and fill-in the blank items. The second section of the questionnaire consists of 16 items in which 5 of them assess the frequency of alcohol drink and the remaining 11 items assess the immediate/short term influence of alcohol drink on children. It was constructed in the form of four points rating scale. The third section consists of 21 items assessing general health and behaviour problems of children. Of these, 11 items assess somatic problems including headache, stomachache and cardiac problem; 6 items assess level of anxiety and depression and 4 items assess sleep difficulties of the child. These items were constructed in the form of 3-points rating scale. The reliability indices of the sub-scales are Cronbach's alpha .52, .82, .81, .76, and .50 for frequency, immediate consequence, somatic problem, anxiety/depression, and sleep problem respectively.

Mothers' Questionnaire

A questionnaire assessing child alcohol use and child externalizing behaviour problem was administered to mothers. It consists of 32 items with two sections. The first section has 12 items which assess demographic and initial data of child alcohol use. They are constructed in the form of multiple choice, yes/no, and fill-in the blank items. The remaining 20 items were constructed in the form of 3-points rating scale and have two sub-scales: destructive and aggressive. Destructive sub-scale consists of 7 items and assesses the destructive behaviour of children. While aggressive sub-scale consists of 13 items and assesses aggressive behaviour of children. The reliability indices of the sub-scales as estimated by Cronbach's alpha were.64 and .80 for destructive and aggressive scale respectively.

Procedures

Procedures of Instrument Development

The questionnaires were constructed by researchers based on literature and previously developed instruments (such as Achenbach Child behaviour Checklist). The validity (face and content validity) of the instrument and clarity of each item were critically judged. The instrument was initially developed in English and then translated to Amharic. Pilot study was conducted on 38 children and their mothers who are living in Dangla Woreda, Gultabishken Kebele to examine the reliability indices of the questionnaires. Accordingly, inter item correlation and item total correlation were examined to judge the quality of the instrument.

Procedures of Data Collection

Children whose grade level ranges from five to seven filled the questionnaire in their classrooms. But, for the mothers, since majority of them could not read and write, female data collectors were assigned to read the items of the questionnaire and rate the responses properly. These data collectors were selected from respective Kebeles by the nomination of Kebele officials. Training was given to the data collectors about the purpose of the research, ethical consideration, and how they read the items and rate the response of the participants on the questionnaire.

To maintain the data quality, the questionnaire was prepared in the form of booklet consisting of both children's and mothers' questionnaire. It was first administered to children and then to mothers. Children were instructed to write their names and the name of their mothers in the questionnaire to make the matching perfect.

Ethical Consideration

Oral consent was obtained from Woredas' education officials, Kebele officials, school directors, children and mothers. Children and mothers were informed about the purpose of the study and invited to participate voluntarily. They were also informed that all the information they gave would be kept confidential and used for research purpose only. Children were specifically informed that writing their name and their mothers' name was necessary to match the two responses for the analysis and no information was disclosed for others in any ways.

Data Analysis Techniques

Data analysis was made using SPSS version 20 software. Before the main data analysis was carried out, data screening and cleaning were made. Questionnaires were checked manually for their completeness based on which incomplete questionnaires were excluded. Data cleaning was carried out using frequency distribution and missing data of the continuous data were treated using mean substitution method. And then percentage, independent sample *t* test and simple linear regression analysis were employed to perform the main data analysis. Percentage was used to examine the prevalence and age of alcohol use onset among the study sample; independent sample *t* test was employed to examine if there was a statistically significant difference between alcohol users and non-users in terms of health and behaviour; simple linear regression analysis to examine the extent to which alcohol use influences the health and behaviour of children.

Results

Demographic Characteristics of Research Participants

In this study, 390 children (154 males and 229 females) whose age ranged from 10 to 17 years, with mean age of 14 and standard deviation (SD) 1.62, were involved. In addition, 390 of those children's mothers whose age ranged from 23 to 70, with mean age of 40 and *SD* 9.16, participated. The places of residence of the participants were Yetnora Kebele (Dejen Woreda, East Gojam Zone), Zindib Kebele (Jabitenan Woreda, West Gojam Zone) and Awuzet Kebele (Farta woreda, South Gonder Zone). Majority of the sample children lived with intact family (81%), and 88.7% of them came from families whose major income source was farming. Above 70 % of the fathers of those children had low or no formal education, with 46 % having primary school education and 25% being illiterate. Approximately, 46% of the mothers of those children were also illiterate.

The Prevalence of Alcohol Use among Young Children

The findings from of children's report revealed that 81.8 % of the sample children drank alcohol. The most liked alcohol is *tela* (66.2%), followed by *tej* (8.7%). Other factory processed alcohols such as wine, ouzo, and beer were preferred by 7.2%, 7.2%, and 6.2% of the children respectively. *Araqie*, which has the highest alcohol content, was found to be the least liked alcohol (1.5%). Similarly, 61% of the mothers confirmed that their children under 12 years of age currently drank alcohol and 76% of them said that the most liked alcohol by their children was *tela*.

With regard to the frequency of the most liked alcohol drink, it was found that 5.9% of the sample children drank the most liked alcohol daily; 54.1% of them drank the liked alcohol when it was available, and 29.7% of them drank that alcohol for holidays only. With regard to the intensity, the amount drunk ranged from 0.5 glass to 7 glasses for *tela*, from 0.5 bottle to 4 bottles for beer, and from 1 *melekia* (20 ml) to 3 *melekias* (60ml*)* for *araqie* at a time. Approximately 70% of those children got their preferred alcohol at home.

When the frequency of alcohol use was examined, the findings from children's response revealed that:

Fifty percent of the children drank *Tela* once or twice a week followed by *araqie* (11.8%), *tej* (10.8 %), beer (9.5%) and other factory processed drinks such as wine and ouzo (5.1%).

- Approximately 11 % and 3% of them drank *tela* and *araqie* respectively three to five times a week.
- Approximately 11% and 0.3% of the sample children drank *tela* and *araqie* daily.

From these findings, it is possible to detect that about 22% and 3.3 % of those children are addicted to *tela* and *araqie* respectively, making it a total of 25.3% of the sampled children.

Age of Onset

It was found that children began alcohol use at young age. Approximately, 19% of the sample children said that they had begun using alcohol at an early age, and this was confirmed by the mothers of those children (who constitute 14% of the total samples). In addition, 9.5 % of the children said they did not remember when they started drinking.

Table 1

Age of alcohol use begun among children

Age of onset	Children's response		Mothers' response	
	f	***%***	***f***	***%***
Age of 6 months	2	0.5	4	1.0
6 months-2 years	15	3.8	48	12.6
3-5 years	46	11.8	95	24.9
6-12 years	105	26.9	42	11.0
12-18 years	31	7.9	12	3.1
I don't remember	37	9.5	2	0.5
At early age	72	18.5	53	13.9
Missing	82	21.0	125	32.8
Total	390	100.0	381	100.0

On the other hand, approximately 13% of the mothers said that the sample children began alcohol use between the ages of 6 months and 2 years; 25 % of them said that those children began alcohol use between 3 and 5 years of age; and 11 % of the mothers said that those children began alcohol when they were between 6 and 12 years of age. On the other hand, 13.9 % of mothers who could not remember the exact age when the children had begun drinking alcohol reported that their children began alcohol experimentation at early age.. Thus, this implies that approximately 50% of those children began alcohol experimentation between the ages of 6 months and 12 years and if the early age responses are added it rises to 64%.

Differences between Alcohol Users and Non-Users in terms of Health and Behaviour

With regard to short term influence, the *t* test analysis showed that there is a statistically significant difference between alcohol users and non-users (who never drink alcohol) in the level of challenge they face to engage in educational activities ($t(382) = 2.921$, p=.004), social interaction ($t(382) = 2.187$, p=.029), and health and wellbeing ($t(382) = 3.574$, $p < .001$). This means, children who frequently drink alcohol have difficulty in their education, social life, and health more than children who do not drink alcohol.

Similarly**,** a statistically significant difference was observed between alcohol users and non-users in general health and behaviour problems such as somatic problems ($t(382) = 4.156$, $p< 001$); anxiety and depression ($t(382)= 5.280$, $p< .001$); and sleep problem ($t(382)= 3.138$, $p<.001$). This means, children who drink alcohol experience more somatic problems, anxiety and depression, and sleep problems than children who never drink alcohol.

On the reverse, a statistically non-significant difference was obtained between alcohol users and non-users in relation to aggressive and destructive behaviour.

The Association of Alcohol Use with Children's Health and Behaviour

The findings based on children's response revealed that there is a statistically significant causal association between alcohol use and immediate /short-term health and behaviour problems and between alcohol use and general health and behaviour problems. The simple linear regression analysis standardized beta results depicted that as children's report of alcohol use increased by 1 standard deviation, reports on problems in educational activities, social interaction, health and wellbeing also increased by .391, .223 and .241 standard deviation respectively which are statistically significant at $p< .001$.

Table 2

Regression Analysis Result of Alcohol Use and Immediate Child Health and Behaviour

Variables Entered	Dependent variables	R^2	Adjusted R^2	*F*	*Sig.*	Beta	*t*	*Sig.*
Frequency of alcohol use	Problems of Educational activities	.153	.151	70.05	.000	.391	8.370	.000
	Problems of Social interaction	.050	.047	20.32	.000	.223	4.507	.000
	Problems of Health and well being	.058	.056	23.94	.000	.241	4.893	.000

The finding also revealed that there is a statistically significant causal association between child alcohol use and general health condition. It is found that as alcohol use increased by 1 standard deviation, somatic problems, anxiety and depression, and sleep problem also increased by .231, .245, and .230 standard deviation respectively which are statistically significant at $p<.001$.

Table 3

Regression Analysis Result of Alcohol Use and Children General Health and Behaviour problems

Variables Entered	Dependent variables	R^2	Adjusted R^2	*F*	*Sig.*	Beta	*t*	*Sig.*
Children's report of Frequency of child alcohol use	Children's report of somatic problems	.053	.051	21.90	.000	.231	4.68	.000
	Children's report of anxiety and depression	.060	.067	24.73	.000	.245	4.97	.000
	Children's report of sleep problem	.053	.050	21.69	.000	.230	4.66	.000
	Mothers' report of child destructive behaviour	.001	-.002	0.36	.549	.030	0.60	.549
	Mothers' report of child aggressiveness	.006	.003	2.34	.127	.077	1.53	.127

The results presented on Table 3 with respect to the association between frequency of alcohol use and health and behavior problems findings revealed a statistically non-significant causal association between frequency of child report of alcohol use and mother's report of destructive and aggressive behaviours of children.

Discussion

The findings of the present study revealed that alcohol use is alarmingly prevalent among children at the study Kebeles: Yetnora, Zindib and Awuzet. It is found that 81.8 % of the study children aged below 18 drink different kinds of alcohols (such as *tela, areqie,* and *tej*); the majority of these children (66.2%) like *tela* over other alcohols and their intensity of *tela* intake ranges from 0.5 glass to 7 glass at a time. This implies that these children drink more *tela* than other cultural beverages. This may be due to the perception the community has about *tela*. The experience of the researchers and the finding of WHO (2004) and Tafere (2015) indicate that in the study community *tela* is perceived as a harmless drink compared to other homebrewed drinks such as *areqie* and *tej*. In addition, since most families in the study areas are farmers, *tela* is available at home throughout the year and provided with food during work time perceiving that it is energy source. These types of community perceptions may lead children to like *tela* and drink much without knowing the consequences it brings on their lives.

Regarding the frequency of alcohol intake by the sample children, it is found that approximately 11 % and 3% of them drink *tela* and *areqie* respectively three to five times a week. Approximately 11 % and 0.3% of the sample children daily drink *tela* and *areqie* respectively. From these findings it is possible to say that majority of these children are at risk of

alcohol addiction and some of them are already addicted to *tela* and *areqie* at younger age. These alarming findings indicate the need to design intervention mechanisms so as to provide continuous education for the community of the study as well as other similar rural areas throughout the country.

The findings also showed that half of the sample children began alcohol use between the age of 6 months and 12 years—an age that is much younger than what studies in other countries reveal. For example, a review of studies in USA, UK, Australia, Canada, and several other countries worldwide done by Newbury-Birch et.al (2009) found that the majority of young people had an alcoholic drink before the age of 16, and the first experiences of drinking alcohol usually occurred between the ages of 8 and 12. In Quebec, it was found that average age at which children had their first drink was 12.7 for girls and 12.4 for boys (Éduc'alcool, 2009). Compared to this, children testing alcohol at the age of 6 months as reported in this study is extremely early. Early alcohol uses result in early addiction and long-lasting harm.

The findings also revealed that children who frequently drink alcohol experienced more problems in their educational activities, social interaction, and health and well-being than children who never drink alcohol. This implies that frequent alcohol use harms health and psychological wellbeing of children. This finding is similar to what was stated in Bonnie and O'Connell (cited Hanes, 2012): the pharmacological effects of alcohol interfere brain functioning, hinder the advancement of thinking and social interaction. It is also similar to the findings of Newbury-Birch et al. (2009) and WHO (2006) which indicated that harmful alcohol use can directly affect physical and cognitive function and reduces self-control making an individual more likely to act violently.

Similarly, the study also showed that children who frequently drink alcohol experienced more somatic problems (such as headache, stomachache, and cardiac problems), anxiety and depression, and sleep problems than children who never drink alcohol. These findings are consistent with the findings of Newbury-Birch et al., (2009) which asserts frequent and heavy use of alcohol have been associated with low self-esteem, depression, conduct disorders, antisocial behaviour, and anxiety in adolescents. The findings are also similar to the findings of Hillbom et al (cited in Richter & Richter, 2001) which indicate that frequent alcohol use affects the digestive system and may lead to gastric ulcers, liver damage, or, in severe cases, cirrhosis of the liver.

These symptoms may be prevalent among these children because majority of them began alcohol at early age. Different researchers mentioned that early exposure to alcohol may cause a number of behavioural and health problems later in life. The systematic review conducted by Newbury-Birch et al. (2009) revealed that children who are introduced to alcohol before the age of 6 are more than twice as likely to report frequent, heavy or problematic drinking at age 15 compared to children who were not exposed to alcohol before the age of 13 years. Thus, the question that needs to be raised here is what is happening to the children who tasted alcohol between the age of 6 months and 2 years? In the present study, approximately 14 % percent of the children who drink *tela* were within this age range.

The legal drinking age in Ethiopia is 18 years. The criminal code Article 531: Endangering the Health of Another by Alcoholic Beverages or Spirituous Liquors (Proclamation No. 414/2004) states the following:

> Whoever endangers the health of another, intentionally and unscrupulously, by administering or serving, or by causing or permitting to be administered or served, to minors or to persons already manifestly suffering from excessive consumption thereof, alcoholic beverages or spirituous liquors of such kind or in such quantity as to make their injurious effect certain or probable, is punishable with simple imprisonment not exceeding one year.

Although there is a legally set age of drink and code of conduct, how many people in the country obey these rules needs to be questioned.

Government has the responsibility to assure the protection of children from alcohol use as per Article 33 CRC which states "Governments should use all means possible to protect children from the use of harmful drugs and from being used in the drug trade" (Unicef, 2005). However, according to the report of WHO (2014), in Ethiopia, there is no written national policy (adopted/revised)/ national action plan, national government support for community action, or national monitoring system (s) working on alcohol. Therefore, the government needs to emphasize working on child protection programs so as to save its generation from alcohol harm.

Conclusions and Recommendations

From the findings, it can be concluded that children of the study area are at a great risk of developmental problems due to early onset of alcohol consumption. Producing alcohol free generation should be one of the primary concerns of the government. Children should be protected and reared in a promising environment for a country to develop. However, due to early experimentation of alcohol, minors in the study area are at risk of various alcohol-related diseases and alcohol addiction which most likely will affect the quality of their adult life. This may be due to low awareness of parents and the society at large about the negative consequence of alcohol on children. Thus, governmental and nongovernmental organizations need to design effective educational programs for parents, children, and the society at large. This can be done by

- providing integrated continuous community education for the society on consequences of early alcohol experimentation, healthy child rearing practices, child protection and child right using health extension workers and teachers and religious leaders;
- launching regular media programs on positive child rearing practices, harmful effects of alcohol use at early age, the risk factors of early age alcohol use, and the legal implications of exposing minors to alcohol so that children can be protected from developmental turmoil; and
- designing monitoring mechanisms of the implementation of the existing child alcohol use policies at various levels.

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