






ORIGINAL PAPER

Oyediran Emmanuel Oyewole  (ABCDEF), Christiana Mautin Todowede  (ABCDEG),  
Isaac Oluwafemi Dipeolu  (DEFG)

## Knowledge, perception and child care practices among adolescent mothers in Ibadan Metropolis, Nigeria

Department of Health Promotion and Education, Faculty of Public Health, College of Medicine, University of Ibadan, Ibadan, Nigeria

### ABSTRACT

**Introduction.** There is little information regarding childcare practices among adolescent mothers in the study areas.

**Aim.** This study was aimed at investigating knowledge, perception and childcare practices among adolescent mothers.

**Material and methods.** A descriptive cross-sectional survey was conducted on randomly select 382 adolescent mothers. A validated semi-structured questionnaire was used to collect data, which were analysed using, descriptive and multivariate analyses with p-value set at 0.05. Age of respondents was 18.5±0.7 years.

**Results.** Majority (80.6%) had poor knowledge of when to start ante-natal care. Also, 70.0% of the respondents could not perceive growth monitoring as a necessary strategy for child survival and 86.4% perceived diarrhoea as normal for children during the teething period. Many (58.4%) did not practise exclusive breastfeeding. Respondents with secondary education were less likely to have poor knowledge than those with primary education (OR: 0.2, CI: 0.6-0.9, 95%). Respondents, who received supervision from older women during childcare, were less likely to have poor childcare practice than those who did not (OR: 0.2, CI: 0.4-0.7, 95%).

**Conclusion.** Respondents had poor knowledge of childcare practices when childcare survival strategies were used as the yardstick for evaluation. Involvement of older women is suggested to assist adolescent mothers improve their knowledge and practices of childcare.

**Keywords.** adolescent mothers, child survival strategies, childcare practices

### Introduction

Mothers play essential roles in the life of children; an experienced mother with good observation skills can quickly identify many problems in the early stage of life of the child especially where childcare is in the right perspective. Starting from birth, early bonding between

mothers and their babies has been observed to contribute to mental health development of children.<sup>1</sup> Childcare has also been considered from the perspectives of one-on-one interactions with infants and having good knowledge of child feeding practices as well as playing activities; done more often between children or with

**Corresponding author:** Oyediran Emmanuel Oyewole, e-mail: [diranoyewole@gmail.com](mailto:diranoyewole@gmail.com), [oyewole2002@yahoo.com](mailto:oyewole2002@yahoo.com)

**Participation of co-authors:** A – Author of the concept and objectives of paper; B – collection of data; C – implementation of research; D – elaborate, analysis and interpretation of data; E – statistical analysis; F – preparation of a manuscript; G – working out the literature; H – obtaining funds

Received: 3.05.2020 | Accepted: 25.05.2020

Publication date: September 2020

other caregivers such as siblings or grandparents. The study posited that community members considered that caring for children from 0–2 years is a woman's domain as this was acknowledged by men and women.<sup>2</sup> Ang and Tabu described care as “the provision (in the household and the community) of time, attention, and support to meet the physical, mental and social needs of the growing child in an educational environment with parental support”.<sup>3</sup> Some studies revealed that poor childcare practices from caregivers are factors contributing to child mortality.<sup>4,5</sup> Things are changing today as the number of adolescent mothers in Nigeria is increasing steadily and this has significant health and social implications for both adolescent mothers and child.<sup>6</sup>

Teenagers who become parents are likely to experience more educational, health, social and economic difficulties than their counterpart who are not yet parents.<sup>7</sup> Consequently, their children may be exposed to more significant social deprivation and disadvantage. These outcomes have been demonstrated to be more adverse still in the case of looked-after children who become parents. This is because this group is more likely than others to be unemployed, have more emotional health problems, be expected to be independent and have little support.<sup>8</sup> The majority of adolescent mothers have little knowledge and competence for childcare and many are not capable of providing their infants with basic needs due to their low socio-economic status.<sup>8</sup> Mangeli et al., also noted that adolescent mothers require support on several issues such as childcare, education, financial problems, and varying needs of their own and that of their children.<sup>8</sup> Infants of teenage mothers are prone to low birth weight, prematurity, developmental disabilities, and poorer developmental outcomes than the infants of older mothers. Deficits in cognitive and social development in the children of adolescent mothers may persist into adolescence.<sup>9</sup> The adolescents who become parents are known to experience more educational, health, social and economic difficulties than young people who are not parents. Consequently, their children may be exposed to more enormous social deprivations and disadvantages.<sup>6</sup>

Mothers are the primary caregivers, and they must have the required maturity and skills necessary for giving infant care. It has been shown that teenage pregnancy is of significant health concern because of its association with higher morbidity and mortality for both the mother and child.<sup>6</sup> However, few studies have documented the knowledge, perception and practices related to childcare among adolescent mothers.

According to Qayyum et al., childcare practices should focus on feeding, sleeping, toileting, among other things. Childcare practices require enough resources for the caregiver to be able to put knowledge into practice.<sup>10</sup> It is essential to document the constraints to good

childcare practices among adolescent mothers to design appropriate intervention strategies to reduce likely adverse health and social outcomes. This will go a long way to achieve Goal 3 of the Sustainable Development Goals.

### **Aim**

This study was, therefore, designed to investigate the knowledge, perception and practices related to childcare among adolescent mothers in Ibadan metropolis.

### **Material and methods**

The study was a descriptive cross-sectional survey conducted in Ibadan metropolis. Ibadan is the capital of Oyo State and located in South West of Nigeria. The metropolis is divided into five Local Government Areas (LGAs) namely Ibadan North West, Ibadan North East, Ibadan North, Ibadan South West and Ibadan South East. Residents of the city are mostly of Yoruba ethnic group, which is the dominant ethnic group in the city. Most residents are in the low and middle socioeconomic status.

#### *Sampling, Instrument and Procedure for Data Collection*

The study population were all consenting adolescent mothers aged 15–19 years (any female within the age range who gave birth or had her first pregnancy) in the selected communities in Ibadan metropolis. A four-stage sampling technique adopted to select 382 adolescent mothers through the assistance of community health care workers and community women leaders during the period of the data collection. Assenting and consenting respondents were provided with detailed information about the objectives of the study, and after adequate understanding, they gave their assent/consent and indicated willingness to participate in the study by signing the informed consent form.

Interviewers, comprising community women and health workers were trained on interpersonal communication skills, interviewing techniques, and ethical considerations. After the training, there were practical sessions through demonstration and return-demonstration of the new skills acquired. They also completed and signed confidentiality forms before the commencement of the study. A validated interviewer-administered semi-structured questionnaire (both English and Yoruba versions) was used for data collection. The questionnaire consisted of five sections viz respondents' demographic characteristics, assessment on the level of knowledge of adolescent mothers on childcare, perceptions of teenage mothers on childcare, childcare practices among adolescent mothers and the constraints to childcare practices among adolescent mothers. Respondents' knowledge of childcare was assessed on a 24-point knowledge scale; perception of childcare was assessed on a 16-point perception scale while practice was measured using a 36-point practice scale.

**Table 1.** Respondents socio-demographic characteristics (N=382)

| Demographic characteristics | N <sup>o</sup> | %    |
|-----------------------------|----------------|------|
| <b>Age (in years)</b>       |                |      |
| 15                          | 3              | 0.8  |
| 16                          | 5              | 1.3  |
| 17                          | 11             | 2.8  |
| 18                          | 142            | 37.2 |
| 19                          | 221            | 57.9 |
| <b>Marital status</b>       |                |      |
| Married                     | 349            | 91.4 |
| Single                      | 33             | 8.6  |
| <b>Working status</b>       |                |      |
| Working                     | 317            | 83.0 |
| Not working                 | 65             | 17.0 |
| <b>Religion</b>             |                |      |
| Christianity                | 145            | 37.9 |
| Islam                       | 236            | 61.8 |
| Traditional                 | 1              | 0.3  |
| <b>Parity</b>               |                |      |
| More than one child         | 183            | 47.9 |
| One child                   | 199            | 52.1 |
| <b>Pregnancy intentions</b> |                |      |
| Intentional pregnancy       | 281            | 73.6 |
| Unintentional Pregnancy     | 101            | 26.4 |

With the assistance of Primary Health Care workers in the selected communities (based on their level of rapport with community members), respondents in the selected political wards and communities were visited in their homes and interviewed. The selection of the respondents was purposive due to the nature of the inclusion criteria (adolescent mothers aged 15-19 years). Data collection process lasted for about four months.

#### *Measures and Data Management*

Each questionnaire was checked in the field for completeness and later sorted, cleaned, coded and entered into a computer; analysis was performed using the IBM/Statistical Package for Social Sciences (IBM/SPSS) version 22 software. The analysis consisted of descriptive and inferential statistics (Chi-square test and logistic regression) with the level of the significance set at  $p \leq 0.05$ .

Scores  $\leq 12$  points and  $> 12$  were categorised as poor and good knowledge of childcare, respectively. Similarly, perception of respondents towards childcare was rated as scores  $\leq 8$  and  $> 8$  categorised as wrong and right perception of childcare, respectively. Respondents' practice of childcare was assessed with scores  $\leq 18$  and  $> 18$  categorised as poor and good childcare practice, respectively.

#### *Ethical Considerations*

Ethics approval was obtained from the Oyo State Ministry of Health Research Ethical Review Committee, Ibadan, Nigeria with Ref. No. AD 13/479/309. Written informed consent was obtained from each respondent after explaining the objectives of the study, the procedures involved, assurance of confidentiality and that participation is voluntary.

#### **Results**

##### *Socio-demographic Characteristics of Respondents*

Respondents' age ranged between 15 to 19 years, with a mean age of  $18.5 \pm 0.7$  years, the highest level of education being secondary school (65.7%). Islam (61.8%) topped the list of the religions practised by the respondents, while trading (40.8%) and crafts/artisans (30.6%) were the common occupations of the respondents. The majority of the respondents (91.1%) were not living with parents (Table 1).

##### *Knowledge of childcare practices among adolescent mothers*

Finding from the study showed that most respondents (80.6%) did not know the time when a pregnant woman should begin antenatal class. Almost all of the respondents (94.5%) said breast milk should be introduced to a baby immediately after delivery, while (5.5%) said it should be introduced some days after delivery and (0.3%) did not know. However, 43.7% of the respondents said that a mother could adopt a suitable family planning method after six weeks of delivery; while 30.4% did not know, 12.0% said some months after delivery; 11.3% said immediately after child delivery, 2.4% said when a woman no longer wants to give birth again and 0.3% said when menstruation starts. Moreover, 25.9% of the respondents did not know when an infant should be fully immunised, 48.4% reported at nine months, while 18.3% said at one year, 5.0% said after one year and 2.4% said before nine months. Also, 48.4% of the respondents said that oral rehydration therapy is used for diarrhoea, while 38.4% did not know, 12.6% said it is used for sick children, and 0.5% said it is for teething. The majority, (80.6%) of the respondents did not know the average weight of a baby at birth, 13.1% said above 2.5kg, 4.2% said 2.5kg and 2.1% said below 2.5kg. The majority of respondents (81.2%) had poor knowledge of childcare practices (See Table 2).

##### *Perception of childcare practices among adolescent mothers*

Ninety-four per cent did not perceive attending antenatal care as a waste of time, 3.7% agreed that it is a waste of time, while 2.4% were not sure. Fifty-five per cent of the respondents disagreed that water should be given to a baby from birth because water quenches thirst, 41.1% agreed to the statement, while 3.9% were

**Table 2.** Knowledge of childcare among adolescent mothers (N=382)

| Knowledge Variables  | N <sup>o</sup>       | %        |
|--|----------------------|----------|
| <b>The time when a pregnant woman should attend antenatal care clinic</b>            |                      |          |
| I don't know   | 308                  | 80.6     |
| When she is aware of her pregnancy   | 74                   | 19.4     |
| <b>The time when water should be introduced to a baby</b>                            |                      |          |
| At birth   | 81                   | 21.2     |
| Before six months post natal   | 97                   | 25.4     |
| At six months post natal   | 196                  | 51.3     |
| I don't know   | 8                    | 2.1      |
| <b>A nursing mother cannot get pregnant if she practices exclusive breastfeeding</b> |                      |          |
| No   | 268                  | 70.2     |
| I don't know   | 65                   | 17.0     |
| Yes  | 49                   | 12.8     |
| <b>The time when a baby should have first immunisation</b>                           |                      |          |
| At birth   | 99                   | 25.9     |
| Before the 8 days of naming ceremony   | 129                  | 33.8     |
| After the 8 days of naming ceremony  | 126                  | 33       |
| I don't know   | 28                   | 7.3      |
| <b>Playing with a toy can be a source of infection to babies</b>                     |                      |          |
| No   | 232                  | 60.7     |
| Yes  | 116                  | 30.4     |
| I don't know   | 34                   | 8.9      |
| <b>Rating</b>  | <b>N<sup>o</sup></b> | <b>%</b> |
| Poor knowledge   | 310                  | 81.2     |
| Good knowledge   | 72                   | 18.8     |
| Total  | 382                  | 100.0    |

Mean knowledge score = 11.642 SD = 2.432

not sure. A majority (80.9%) agreed that diarrhoea is normal for children during teething period, 13.6% disagreed with the statement, and 5.5% were not sure. Also, 52.9% were not sure if growth monitoring was a necessary strategy to monitor child's growth, 30.1% agreed to the statement, while 17.0% disagreed. The summary of respondents' perception of childcare practices showed that many (53.4%) had it wrong (Table 3).

*Childcare practices among adolescent mothers*

A majority (84.6%) of the respondents had never used a family planning method before while (15.4%) had used. The sources of the respondents' children drinking water were bottled water (51.3%), tap water (29.3%), not taken water yet because the baby was less than 6 months old (13.4%), sachet water (3.7%), well (1.6%) and rainwater (0.8%). The majority (63.1%) of the respondents did not treat child's drinking water, 23.6% treated child's drinking water and 13.4% were not applicable. Few (23.6%)

**Table 3.** Perception of childcare among adolescent mothers (N=382)

| Perception Variables  | N <sup>o</sup>       | %        |
|---|----------------------|----------|
| <b>I believe the first breast milk discharged by a mother should not be given to a baby</b>   |                      |          |
| Not sure  | 14                   | 3.7      |
| Agree   | 33                   | 8.6      |
| Disagree  | 335                  | 87.7     |
| <b>I feel vaccines injected in well-nourished children can cause illness in them</b>  |                      |          |
| Not sure  | 14                   | 3.7      |
| Agree   | 15                   | 3.9      |
| Disagree  | 353                  | 92.4     |
| <b>I believe adopting a suitable family planning method does not have a positive effect on a child's health</b>                     |                      |          |
| Not sure  | 63                   | 16.5     |
| Agree   | 69                   | 18.1     |
| Disagree  | 250                  | 65.4     |
| <b>I suppose playing toys are provided for children only to stop them from disturbing the adults and not for any health benefit</b> |                      |          |
| Not sure  | 118                  | 30.9     |
| Agree   | 225                  | 58.9     |
| Disagree  | 39                   | 10.2     |
| <b>Rating</b>   | <b>N<sup>o</sup></b> | <b>%</b> |
| Poor perception   | 204                  | 53.4     |
| Good perception   | 178                  | 46.6     |
| Total   | 382                  | 100.0    |

Mean perception score = 7.389 SD = 0.924

of the respondents boiled children's drinking water, and 76.4% did not respond. Some, (42.7%) of the respondents' children were first immunised after the naming ceremony, 40.8% were immunised before the naming ceremony, 9.9% were immunised at birth, while 5.0% were immunised months after delivery and 1.6% did not know. The majority, (75.7%) of the respondents did not have a first aid box at home. Most, (94.2%) of the respondents' children were weighed last at birth, 2.4% were weighed some months before the survey; 1.6% were weighed few days before the survey, and 1.6% did not know. The majority, (67.3%) disposed their children's excreta in a waste bin, 20.9% used pit latrine, 6.3% flushed in the toilet, 3.9 dropped it in the drainage, 1.0 threw into the bush and 0.5% burned it. Also, 65.7% of the respondents cleaned up after disposing children's excreta using soap and water, 27.0% used water only while 7.3% used disinfectant, soap and water. Few, (29.1%) of the respondents had older women that supervised them during childcare, and 70.9% did not have such assistance. Moreover, 62.3% of the respondents' children played with toys and 51.8% of

the respondents did not sanitise children's toys before allowing them to play with the toys. Assessment of childcare practices among the respondents showed that most (91.6%) of the teenage mothers had poor childcare practice (Table 4).

**Table 4.** Childcare practices among adolescent mothers (N=382)

| Practice item   | N <sup>o</sup>       | %        |
|---|----------------------|----------|
| <b>Received vaccination during pregnancy</b>                                  |                      |          |
| Yes   | 332                  | 86.9     |
| No  | 50                   | 13.1     |
| <b>When breastfeeding was initiated after birth</b>                           |                      |          |
| At birth  | 355                  | 92.9     |
| Some days after birth   | 27                   | 7.1      |
| <b>When water was first given to the baby after birth</b>                     |                      |          |
| Before six months   | 131                  | 34.3     |
| Six months  | 108                  | 28.3     |
| At birth  | 92                   | 24.0     |
| Not yet   | 51                   | 13.4     |
| <b>Child's vaccination status</b>   |                      |          |
| Not up to date  | 344                  | 90.0     |
| Up to date  | 30                   | 7.9      |
| Don't know  | 8                    | 2.1      |
| <b>Preparation of oral rehydration therapy</b>                                |                      |          |
| Don't know  | 254                  | 66.5     |
| Dissolve ORS in a bottle of water   | 91                   | 23.8     |
| Put salt and water into warm water and allow to cool                          | 34                   | 8.9      |
| Dissolve ten cubes of sugar and one teaspoon of salt into one bottle of water | 3                    | 0.8      |
| <b>Rating</b>   | <b>N<sup>o</sup></b> | <b>%</b> |
| Poor practice   | 350                  | 91.6     |
| Good practice   | 32                   | 8.4      |
| Total   | 382                  | 100.0    |

Mean practice score = 17.752 SD = 3.562

#### *Constraints to childcare practices among adolescent mothers*

Almost all the respondents (98.7%) did not have any health condition that affects their childcare practices. Few (26.2%) of the respondents thought they should not have had a child when they did (Table 5).

There was a significant relationship between the level of education of adolescent mothers and knowledge of childcare practices (Table 6). Knowledge of childcare practices was higher among respondents with secondary education. Furthermore, there was a significant relationship between adolescent mothers' knowledge and

their perception of childcare (Table 8). A significant relationship was also found between the knowledge of adolescent mothers and opinion on childcare practices (Table 9). There was a significant relationship between the knowledge of childcare and teenage mothers' practices (Table 10).

**Table 5.** Constraints to childcare practices among adolescent mothers (N=382)

| Variables  | N <sup>o</sup> | %    |
|--|----------------|------|
| <b>Receive any health education lesson on childcare practices</b>                |                |      |
| No   | 41             | 10.7 |
| Yes  | 341            | 89.3 |
| <b>Receive any health education lesson on childcare practices after delivery</b> |                |      |
| No   | 34             | 8.9  |
| Yes  | 348            | 91.1 |
| <b>Work/job hinders from caring for one's child properly</b>                     |                |      |
| Yes  | 17             | 4.5  |
| No   | 365            | 95.5 |
| <b>Dependence on spouse/parents affect one's childcare practices</b>             |                |      |
| Yes  | 11             | 2.9  |
| No   | 371            | 97.1 |
| <b>Inadequate finances affect one's childcare practice</b>                       |                |      |
| Yes  | 101            | 26.4 |
| No   | 281            | 73.6 |
| <b>Location of health facility affect childcare practices</b>                    |                |      |
| Yes  | 142            | 37.2 |
| No   | 240            | 62.8 |

**Table 6.** Comparing level of education and knowledge of adolescent mothers

| Level of education | Knowledge of adolescent mothers |                            |                             |
|--------------------|---------------------------------|----------------------------|-----------------------------|
|                    | Poor<br>N <sup>o</sup> (%)      | Good<br>N <sup>o</sup> (%) | Total<br>N <sup>o</sup> (%) |
| Primary            | 127 (45.2)                      | 154 (54.8)                 | 281 (100)                   |
| Secondary          | 76 (75.2)                       | 25 (24.8)                  | 101 (100)                   |

$X^2 = 26.945$  df = 1 P = 0.003

**Table 7.** Comparing perception and knowledge of adolescent mothers

| Perception | Knowledge of adolescent mothers |                            |                             |
|------------|---------------------------------|----------------------------|-----------------------------|
|            | Poor<br>N <sup>o</sup> (%)      | Good<br>N <sup>o</sup> (%) | Total<br>N <sup>o</sup> (%) |
| Poor       | 188 (94.5%)                     | 11 (5.5%)                  | 199 (100%)                  |
| Good       | 144 (78.7%)                     | 39 (21.3%)                 | 183 (100%)                  |

$X^2 = 20.878$  df = 1 P = 0.000

**Table 8.** Comparing childcare practices and knowledge of adolescent mothers

| Childcare practices     | Knowledge of adolescent mothers |            |           |
|-------------------------|---------------------------------|------------|-----------|
|                         | Poor                            | Good       | Total     |
|                         | Nº (%)                          | Nº (%)     | Nº (%)    |
| Poor                    | 76 (75.2)                       | 25 (24.8)  | 101 (100) |
| Good                    | 127 (45.2)                      | 154 (54.8) | 281 (100) |
| X <sup>2</sup> = 26.945 |                                 | df =1      | P = 0.001 |

*Multivariate Analysis*

Findings from further analysis on respondents’ socio-demographic and knowledge show that only respondents with secondary education were less likely to have poor knowledge than those with primary education (OR: 0.231, 95% CI: 0.624 – 0.943, p-value <0.05) (Table 9).

**Table 9.** Predictors of knowledge on respondents’ child care practice

| Variable                            | Odds ratio | 95% CI      | p-value |
|-------------------------------------|------------|-------------|---------|
| <b>Marital status</b>               |            |             |         |
| Single                              | 1.000      |             |         |
| Married                             | 0.436      | 0.120–1.591 | 0.209   |
| <b>Educational Status</b>           |            |             |         |
| No formal/Primary                   | 1.000      |             |         |
| Secondary                           | 0.231      | 0.624–0.943 | 0.003   |
| <b>Religion</b>                     |            |             |         |
| Islam                               | 1.000      |             |         |
| Christian                           | 1.017      | 0.213–4.857 | 0.984   |
| Traditional                         | 0.980      | 0.202–4.755 | 0.980   |
| <b>Pregnancy intention</b>          |            |             |         |
| Intentional                         | 1.000      |             |         |
| Accidental                          | 2.675      | 0.329–1.741 | 0.143   |
| <b>Parity</b>                       |            |             |         |
| More than one child                 | 1.000      |             |         |
| Only one child                      | 0.234      | 0.862–1.331 | 0.432   |
| <b>Supervision from older women</b> |            |             |         |
| Supervised                          | 1.000      |             |         |
| Non supervised                      | 1.159      | 0.650–2.067 | 0.618   |

Also, findings from further analysis on respondents’ socio-demographic and practice show that respondents who received supervision from older women during childcare were less likely to have poor childcare practice than those who received no supervision (OR:0.257, 95%CI: 0.424–0.734, p-value<0.05) (Table 10).

**Discussion**

In comparison with the NIGERIA Demographic Health Survey of 2018; teenage mothers are more likely to experience adverse pregnancy outcomes and put to the lowest socioeconomic status.<sup>6</sup>Today, it is difficult for the teenage

mother who was forced out of school by pregnancy to return to school after delivery because they must care for the child. Both the school and community will not openly welcome their return to school for the fear that the adolescent mother will become a bad influence in school. If she manages to get back to school, she may have to put up with a lot of ridicule from her colleagues. Barmao-Kiptanui and colleagues found that teenage mothers dropped out of school were generally worse off with a *per capita* income half of that of older mothers.<sup>11</sup> Bihoun and colleagues also pointed out that repeat pregnancy and births in teenage mothers have been linked to decreased educational achievement, increased dependence on governmental support by the adolescent mother, increased infant mortality, and low birth weight.<sup>9,12</sup> According to Bihoun et al., these adverse outcomes result in increased societal expense and contribute to the continuation of the adolescent pregnancy cycle.<sup>9</sup>

**Table 10.** Predictors of childcare practice

| Variables                           | Odds ratio | 95% CI      | p-value |
|-------------------------------------|------------|-------------|---------|
| <b>Marital status</b>               |            |             |         |
| Single                              | 1.000      |             |         |
| Married                             | 3.431      | 0.220–1.693 | 0.509   |
| <b>Educational Status</b>           |            |             |         |
| No formal/Primary                   | 1.000      |             |         |
| Secondary                           | 1.348      | 0.176–1.816 | 0.421   |
| <b>Religion</b>                     |            |             |         |
| Islam                               | 1.000      |             |         |
| Christian                           | 2.517      | 0.363–3.658 | 0.487   |
| Traditional                         | 1.654      | 0.557–1.047 | 0.3182  |
| <b>Pregnancy intention</b>          |            |             |         |
| Intentional                         | 1.000      |             |         |
| Accidental                          | 2.675      | 0.329–1.741 | 0.143   |
| <b>Parity</b>                       |            |             |         |
| More than one child                 | 1.000      |             |         |
| Only one child                      | 0.331      | 0.563–2.431 | 0.722   |
| <b>Supervision from older women</b> |            |             |         |
| Non-supervised                      | 1.000      |             |         |
| Supervised                          | 0.257      | 0.424–0.734 | 0.001   |

Findings also showed that about a quarter of the respondents had unintended pregnancies. This finding was consistent with that of Yarber and colleagues, where they observed that most teen pregnancies are unwanted while about 22% are planned.<sup>13</sup> Yarber et al. noted that one-third of pregnant teens received inadequate parental care.<sup>13</sup> Thus, babies born to young mothers are more likely to have childhood health problems and hence may have more frequent hospital visits compared to those born to older mothers.

Overall, childcare-related knowledge among teenage mothers was poor among the respondents, and this

reflected in their knowledge of oral rehydration therapy (ORT), exclusive breastfeeding and immunisation. Less than half of the respondents were able to link ORT with diarrhoea. This finding is similar to that of Sanusi and Gbadamosi where they found that adequate knowledge of child survival was low among mothers less than 20 years and they had the least knowledge score about ORT.<sup>5</sup>

A majority of the respondents perceived diarrhoea as normal for children during the teething period, which is similar to other studies in Nigeria and Ethiopia, where it was reported that mother perceived that teething period must come with diarrhoea.<sup>14,15</sup> This perception is a common misconception in other parts of the world, which has led to poor management with serious health outcomes.

A majority of the respondents in the present study had never used any form of family planning methods before, which means that there is a possibility of them getting pregnant within short interval. Templeman and colleagues investigated postpartum contraceptive use among adolescent mothers in the United States, where 70.0% reported sexual activity by age 19 and each year, 8-10% becomes pregnant. Of those adolescents who gave birth, 17-35% will become pregnant again within a year of delivery.<sup>16</sup> The finding is, however, contrary to that of Agbor, and Adonis et al., where they found that less than half of teenage mothers in their research in Cameroon had been to a family planning centre.<sup>17,18</sup> A majority of their respondents initiated breastfeeding after birth which is inconsistent with the findings of a study among adolescent mothers in Bangladesh where only 44.6% of new-borns were breastfed within 1 hour of birth.<sup>4</sup> Also, a few respondents had the first immunisation at birth for their children which accounts for the respondents' children incomplete vaccination status. This finding corroborates the result of a study among adolescent mothers in Bangladesh where the proportion of the new-borns that received postnatal care within 24 hours of birth was 9%.<sup>4</sup>

Growth Monitoring and Promotion (GMP) is vital for the early detection of malnutrition and illnesses in children. However, a few respondents in this present study practised growth monitoring. This finding is in line with the result of Sanusi and Gbadamosi, where growth monitoring was practised by only 7.5% of the mothers studied.<sup>5</sup> The low practice of GMP may be due to inadequate knowledge in reading the growth chart teenage mothers and its relevance to child nutrition and survival.<sup>5,19</sup>

Although, more than a quarter of the respondents had older women who assisted them with childcare; there was a significant association between adolescent mothers who had older women who helped with childcare and their childcare practices. The older women

compensated for the inexperience of the adolescents and served as caregivers, which improved childcare practice among adolescent mothers who had such assistance. The finding is similar with the result of a study which reported that “women acquire their knowledge about natural medicine through information transmitted from older women to younger ones, and such knowledge is exclusively composed by effective practices”<sup>20</sup>

The constraints to childcare practices mentioned by the respondents include inadequate finance to pay bills and daily upkeep, location of health facility, not ready for childbearing, among many others. These constraints are some of the consequences of teenage pregnancies, which were identified by other studies. For example, Kulwa and colleagues found that income and unavailability of household resources were the major constraints to good childcare practice among teenage mothers.<sup>21</sup> Atimati and Adams submitted that educational status, standard of health facility where ante-natal care was received and the age of the mother have great influence on exclusive breastfeeding, which is one the important components of childcare practices.<sup>22</sup> Tomereli and Marcon also found that adolescent mothers are inexperienced and not capable of taking care of children effectively.<sup>19</sup>

## Conclusion

The implication of being forced out of school as a result teenage pregnancy portends great danger for the future development of such teenager. Her ability to compete favourably with her peers in the future economic space is fully mortgaged. She may never come out of the poverty cycle of life and the future of the child she has given birth to may also be negatively affected; creating a nugget of generational disadvantaged population. Practically, this calls for stronger parental/care-giver guidance and also for schools to provide more information on prevention of teenage pregnancy among young girls.

Childcare-related knowledge among adolescent mothers was poor. Besides, there were some wrong perceptions and poor child care practices, which have potentials for compromising the health of their babies. The implication of poor knowledge of ort is that there may be the likelihood of increased child morbidity and mortality among teenage mothers. In practical terms, there is need for special education on ort during post-natal care among teenage mothers.

Many constraints identified in the present study may not be peculiar to teenage mothers alone. However, if they had delayed pregnancy a little for them to be mature, get some measures of education and a stable job to enhance their socioeconomic status, the constraint to childcare practices among adolescent mothers could have been prevented. Teenage

motherhood should not be encouraged or celebrated in any society, as it contributes to some of the indices of under-development, high morbidity and mortality rates, especially in many developing countries. There are many possible negative implications of teenage motherhood, especially in the developing world, where opportunities to regain life's dreams are limited after delivery. A teenage mother will need all the available social supports to survive. If these are not available, survival instincts will show up. These may lead to infanticide, child abuse by neglecting to care for the baby, outright selling of the baby to the willing buyers or the ritualists, abandoning the child on the roadside/dunghill, among many other anti-social vices. Many of these adolescent mothers are young individuals with great potentials that can be harnessed for their personal development and the nation, if adequate interventions to prevent early sexual exposure have been instituted and promoted at the family, community and governmental levels. The need for schools and community-based sex and sexuality education is of essence. Faith-based approach can also compliment what the schools and communities should do. The parent/givers should ensure proper care of their teenagers to prevent early pregnancy by monitoring and cordially relate with them with good inter-personal communication. In case the adolescent is already pregnant, older women close to the adolescent in the community should be encouraged to provide all the necessary support in childcare. It is important to state that adolescent mothers are usually confused and sometimes depressed because of guilt feelings and possible social discrimination. However, this should be the time the older adults, especially their mothers or close members of the family should be of good support by assisting and teaching them basic child survival strategies and coping methods to avoid further mistakes in child care, future plans and counseling against another pregnancy, which can jeopardise their future the more. They should be encouraged to know the opportunities that they still have in life, either by returning to school in a new location or enrol them into any vocation of their choice. Registering for vocational study as an entrepreneur can also be initiated three months post-natal. This is necessary for economic empowerment, which has a great potential for shielding them against another pregnancy once they are economically empowered to meet the basic financial needs. Some local non-governmental or governmental organisations including faith-based societies can establish centres, where these adolescent mothers can be assisted to get back on life track to success.

Overall, the implication of the findings from this study established the fact that teenage motherhood should be prevented using all available and appropriate

health promotion and education approaches. However, when teenage motherhood has resulted, older mother or experienced women/care-giver should provide support and basic child survival strategies training for such a teenage mother to assist in caring for the baby and possibly provide advice on how to prevent another pregnancy too soon. Information on accessing family planning services can also be provided to the teenage mothers.

Practically, teenage pregnancy can be controlled when the family, the schools and the larger society consider this as a problem, which will affect the development of the entire society. Sex education should be encouraged and promoted to prevent the occurrence of teenage pregnancy. However, if it occurs, the teenage mother must be supported to nurture the child and at the same time, encouraged to prevent a re-occurrence and ensure that the teenager's future is brought back on track either through school re-enrolment or entering for a vocational study.

## References

1. Winston R, Chicot R. The importance of early bonding on the long-term mental health and resilience of children. *London J Prim Care (Abingdon)*. 2016;8(1):12-14.
2. Gladstone M, Phuka J, Mirdamadi S, et al. The care, stimulation and nutrition of children from 0-2 in Malawi—Perspectives from caregivers; “Who’s holding the baby?” *PLoS ONE*. 2018;13(6):e0199757.
3. Ang L, Tabu M. Conceptualising Home-Based Child Care: A Study of Home-Based Settings and Practices in Japan and England. *International Journal of Early Childhood*. 2018; 50:143-158.
4. Rahman M, Haque SE, Zahan S, Islam O. Non-institutional births and newborn care practices among adolescent mothers in Bangladesh. *Journal of Obstetric, Gynecologic and Neonatal Nursing*. 2011;40(3):262-273.
5. Sanusi RA, Gbadamosi AO. Do Mothers’ Knowledge and Practice of ‘Child Survival Strategies’ Affect the Nutritional Status of Their Children? *Pakistan Journal of Nutrition*. 2009;8:1506-1511.
6. Qayyum CA, Hassan SM, Zafar AA. Study of Mother’s Knowledge about Childcare and Care Practices in Lahore, Pakistan. *Bulletin of Education and Research*. 2015;37(2):1-9.
7. National Population Commission (NPC) [Nigeria] and ICF. *Nigeria Demographic and Health Survey 2018 Key Indicators Report*. Abuja, Nigeria, and Rockville, Maryland, USA: NPC and ICF. 2019.
8. Smith R. Teenage pregnancies among children in care: research. 2008. <http://www.communitycare.co.uk/Articles/23/01/2008/107036/teenage-pregnancies-among-children-in-care-research.htm>. Accessed 11/04/2012.
9. Mangeli M, Rayyani M, Cheraghi MA, Tirgari B. Exploring the Challenges of Adolescent Mothers from Their

- Life Experiences in the Transition to Motherhood: A Qualitative Study. *Journal of family & reproductive health*. 2017;11(3):165-173.
10. Bihoun B, Zango SH, Traoré-Coulibaly M, et al. Low Birth Weight and Prematurity in Teenage Mothers in Rural Areas of Burkina Faso. *J Preg Child Health*. 2017;4:344.
  11. Barmao-Kiptanui C, Kindiki JN, Lelan JK. Impact of teenage motherhood on the academic performance in public primary schools in Bungoma County, Kenya. *International Journal of Educational Administration and Policy Studies*. 2015;7(2):61-71.
  12. Santelli JS, Jacobson MS. Birth weight outcomes for repeat teenage pregnancy. *Journal of Adolescent Health Care*. 1990;11(3):240-247.
  13. Yarber WL, Sayad BW, Strong B. *Human sexuality: Diversity in contemporary America*. McGraw-Hill. 2013;113-116.
  14. Ene-Obong HN, Iroegbu CU, Uwaegbute AC. Perceived causes and management of diarrhoea in young children by market women in Enugu State, Nigeria. *Journal of Health, Population, and Nutrition*. 2002;18(2):97-102.
  15. Merga N, Alemayehu T. Knowledge, perception and management skills of mothers with under-five children about diarrhoeal disease in indigenous and resettlement communities in Assosa District, Western Ethiopia. *J Health Popul Nutr*. 2015;33(1):20-30.
  16. Templeman CL, Cook V, Goldsmith LJ, Powell J, Hertweck SP. Postpartum contraceptive use among adolescent mothers. *Obstetrics and Gynecology*. 2000;95(5), 770-776.
  17. Agbor VN, Mbanga CM, Njim T. Adolescent deliveries in rural Cameroon: an 8-year trend, prevalence and adverse materno-foetal outcomes. *Reprod Health*. 2017;14(1):122.
  18. Adonis T, Joseph K, Françoise N, Bergis SE, Charles K. Planning Familial chez les Adolescentes Mères d'enfants dans un Centre Urbain du Cameroun [Family planning among teenage mothers in a Cameroonian centre]. *African Journal of Reproductive Health*. 2001;5(2):105–115.
  19. Ruberfroid D, Pelto GH, Kolsteren P. Plot and See! Maternal comprehension of growth chart worldwide. *Trop of Med Int Health*. 2007;12:1074-1086.
  20. Tomeleri KR, Marcon SS. General practice of teenage mothers caring for their children. *Acta Paul Enferm*. 2009;22(3):272-280.
  21. Kulwa KB, Kinabo JL, Modest B. Constraints on good child-care practices and nutritional status in urban Dar-es-Salaam, Tanzania. *Food and Nutrition Bulletin*. 2006;27(3):236-244.
  22. Atimati AO, Adam VY. Breastfeeding practices among mothers of children aged 1–24 months in Egor Local Government Area of Edo State, Nigeria. *Journal South African Journal of Clinical Nutrition*. 2018;33:10-16.