

# Needs Analysis of Depression and Cognitive Distortion Module Among Out-Of-Wedlock Pregnant Adolescents

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**Article history:** Received: 27<sup>th</sup> May 2021 | Received in revised form: 21<sup>st</sup> April 2022 | Accepted: 24<sup>th</sup> April 2022 | Published online: 1<sup>st</sup> May 2022

## Abstract

Pregnancy should be an exciting experience and a moment awaited, but it is different for out-of-wedlock pregnancy. Unmarried pregnancy causes a variety of problems especially to the pregnant mother including psychological problems such as depression and cognitive distortion. This study aims to identify the needs of depression and cognitive distortion module that can be used for out-of-wedlock pregnant adolescents at a shelter homes in Malaysia. A total of 42 respondents had participated in this study of which 30 were former trainees and 12 were managers or teachers from five shelter homes. A set of questionnaires with 20 items representing five main themes used in this study. Descriptive statistical methods such as mean, standard deviation, percentage and frequency were obtained. The research findings show that the respondents agreed with the five themes ( $M=3.30$ ) with a percentage of 85 percent. The implication of this research is that it allows an in-depth exploration of the development of depression and cognitive distortion module which will address the out-of-wedlock pregnancy issue. Apart from that, appropriate theory can also be identified as the basis of module development. In this case, the effectiveness of the module should also be considered.

**Keywords:** needs analysis, depression, cognitive distortion, out of wedlock pregnancy, adolescents pregnancy

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## 1.0 INTRODUCTION

The younger generation determines the continuity and survival of a country and a nation. As a national asset, the government is committed in implementing various policies to ensure that efforts towards the application of positive values and the formation of positive attitudes can be nurtured among the younger generation. Through the Malaysian Youth Policy 2015, the government has set a goal to "strengthen and highlight the potential of youth human capital as a driver of strategic development of the country in the future based on The Federal Constitution and the National Principles" (Ministry of Youth and Sports, 2015: 9). One of the strategies that is the main focus of the 11th Malaysia Plan (RMK11) is to accelerate the development of human capital in order to make Malaysia a developed nation based on the people. However, this wish is unlikely to be realised if the young people who are the assets of the country are involved in social problems such as out-of-wedlock pregnancy which in turn leads to the other mental health issues such as depression and cognitive distortion (Nasir et.al., 2016) that will inhibit this desire.

According to the World Health Organization (2020), at least 10 million unwanted pregnancies occur each year among teenage girls between the ages of 15 and 19 in developing countries (WHO, 2020). Out-of-wedlock pregnancy or unwed pregnancy issue has become notorious for the increasing number of cases. The latest statistics from the Ministry of Health Malaysia shows that from the year of 2012 to 2016, 79,302 pregnancies among girls under 18 were found out-of-wedlock (Faudzi, Nor & Sumari, 2019). Another staggering figure shows that 532,158 out-of-wedlock births were registered in this country from 2005 to 2015 (Saari, Mohd Yusof, Muhamad, Siraj & Habil, 2017). According to Nasir et.al. (2015), out-of-wedlock pregnant women is defined as unmarried pregnant women. Meanwhile, according to Alavi et. al. (2012), an out-of-wedlock pregnancy is a pre-marital pregnancy in which there is sexual intercourse between two people of different genders who do not have a legal marriage relationship. In many countries in Asia, out-of-wedlock pregnancies are viewed looked as disgusting and embarrassing to the families involved (Triwulan, 2009 in Nasir et.al., 2016).

According to Rains (2009), due to the embarrassment, the girl is either asked to marry the baby's father, to abort, to hand over the baby for adoption or to be sent to shelter to hide the pregnancy. Mothers who give birth out-of-wedlock are less fortunate than their peers who are married before giving birth. Unmarried mothers are mostly low-income, have a low level of education and likely to depend on welfare assistance compared to married mothers (Lichter, Graefe, & Brown, 2003; Terry-Humen, Manlove, & Moore, 2001; Driscoll et.al. 1999). Out-of-wedlock pregnancies also cause stress in life contributed by many factors including family crisis, psychological stress, financial difficulties, academic disruption, and harassment from ex-boyfriend (Nen & Hashim, 2020). These contributes to the psychological effects of unmarried adolescents. They are at high risk of mental problems such as depression, stress and loss of confidence

to become parents. Lack of social support from family and community can cause these pregnant women to experience depression, loneliness, poor decision making and drug abuse (Wan Ismail, 2011).

Mental health is the major health problem experienced by Malaysians in 2020 as specified in the report of A National Health and Morbidity Survey conducted by the Ministry of Health in 2011. It is assessed that 29% of Malaysians suffer from depression in 2020, compared to only 12% of the total population who experienced depression in 2011 (Yahya & Sham, 2020). Depression among adolescents is a public health problem that needs serious attention.

## ■ 2.0 LITERATURE REVIEW

Studies on psychological effects of unwed pregnancies conducted locally or abroad increase over time. According to Hodgkinson, Colantuoni, Roberts, Berg-Cross, & Belcher, (2010), pregnancy at a young age is difficult as most are not ready to take on the responsibilities as young mothers. There is no mental and psychological preparation as well as negative perception and rejection by those around them have caused adolescents who are pregnant out-of-wedlock to face risks of stress, depression, and anxiety. This indicates that they are affected mentally, emotionally, and psychologically. This is supported by Knight, Chase, & Aggleton, (2006) who state that many of those who are pregnant out-of-wedlock are prone to emotional disturbance.

A study by Agnafors, Bladh, Svedin, and Sydsjö (2019) found that childbearing at a young age is associated with postpartum depression symptoms. Several factors may influence this finding. First, a young mother faces the challenge of managing her own developmental tasks in addition to the challenge of managing a new-born baby. Second, early motherhood is associated with low levels of education and income (Geronimus, Korenman & Hillemeier, 1994). James-Hawkins, Denardo, Blalock and Mollborn, (2014) reported higher levels of depressive symptoms in respondents with unplanned birth compared with respondents without children. This indicates the role of depression in early and unplanned pregnancy. Logan, Holcombe, Manlove and Ryan (2007) claimed that unintended births can have a negative impact on the mothers' mental well-being which demonstrates a lower level of general psychological well-being during pregnancy. Logan et. al. (2007) also found that the results of a study on the psychosocial effects of teen pregnancy through a cross-sectional study in several shelters found that almost 93% had emotional problems, followed by sleep problems (57.7%) and low self-efficacy (46.2%).

Studies on unwed teenage pregnancy in Malaysia have reported that the main factors contributing to the problem are poverty, lack of parental supervision, poor academic achievement, lack of sexual and reproductive health information, peer influence, media influence, ignorance about religious teachings and premarital sexual practices (Mohd Suan, Ismail, & Ghazali, 2015; Saari et.al. 2017). In a cross-sectional study conducted to residents in shelter homes by Mohd Suan et. al. (2015), the psychosocial implications of adolescent pregnancy involve almost 93% of emotional problems, followed by sleep problems (57.7%) and low self-efficacy (46.2%). According to Vin et. al. (2014), in attending to their psychosocial effects, adolescents in shelter homes use withdrawal, avoidance, and help from others. A study by Saim (2013) found that unmarried pregnant women and unmarried young mothers are rejected by the local community. Studies have found that families use shelter homes as a strategy to avoid embarrassment due to having out-of-wedlock pregnant daughters. Having less contact or not having contact with family puts these young mothers at risk of postpartum depression (Saim, 2013). Unplanned out of wedlock pregnancies trigger stress in life from various angles, namely family crisis, psychological stress, financial difficulties, academic distraction, and disruption from ex-boyfriends (Nen & Hashim, 2020). This has also contributed to the psychological impact on these unmarried mothers. Lack of social support from family and community members can cause these pregnant women to experience depression, loneliness, difficulty in making decisions and get involved with drug abuse issues (Wan Ismail, 2011).

In the context of this country, depression and cognitive distortion among out-of-wedlock pregnant women need to be paid attention to. As defined by World Health Organization, depression is "a common mental disorder that exhibits characteristics such as loss of pleasure or interest, sadness, low self-esteem or guilt, sleep disorders, changes in appetite, feeling tired, and lack of concentration. In critical cases, depression has the potential to become the cause of suicide" (World Health Organization (WHO), 2016, para.1). In other words, depression is a symptom that indicates a lack of normal human performance such as psychomotor activities or a person's lack of intellectual function (Saparuddin, Sham, & Hamjah, 2014). Meanwhile, depression according to a psychological perspective is a feeling of frustration, hopelessness, and sadness that lasts until it is not borne by the individual himself as described by Fariza (2019).

Moreover, the most common definition of cognitive distortion is an error in an individual's thinking caused by biased or incorrect information processing (Yurica and DiTomasso 2005; Clark et al. 1999; Beck 1996;). Meanwhile, Barriga, Landau, Stinson, Liau, and Gibbs (2000) define cognitive distortion as an inaccurate way of providing meanings to one's life experiences. However, according to the initial definition from Beck's (1963) original work, cognitive distortion is defined as the existence of distorted and unrealistic concepts of thought in an individual. Beck (1976) in Sharf (2016) put forward the concept of cognitive distortion in his cognitive theory which shows that there is a linear relationship between cognitive distortion and depression. Beck also highlights that cognitive distortion people have a distorted view of things, people, and life.

The previous studies reveal that the out-of-wedlock pregnant young women that are placed in shelter homes are facing depression and cognitive distortion problem at severe, moderate, and low levels (Nasir et. al. 2015; 2016) in which most of them are found to have moderate levels of depression and cognitive distortion. This indicates that the subjects are likely to be depressed and cognitive distorted. These findings support a study conducted by Ray et. al. (2007) who found that a large number of adolescents in shelter homes experienced severe emotional disturbances, particularly primary or secondary depression. Children and adolescents placed in shelter homes are often at high risk for depression due to a history of abuse, neglect, and other trauma (Ray et. al., 2007). Meanwhile, a study done by Samsuddin, Masroom, and Wan Mohd Yunus, (2019) shows that from 17 participants, three of them testified to be very severe and one respondent had moderate mental health (stress, anxiety, and depression). Brown and Moran (1997) noted that unmarried women experiencing two times the risk of depression compared to married women. Women who give birth before marriage facing various pressures of life and have to bear the shame of their actions as well as having to face society's oblique view of them. They also bear feelings of depression and afraid their actions will be known by their families. Abdul Kadir and Bifulco (2011) stated that unmarried women regardless of single mother, live together or never married have a higher rate of depression compared to married women.

Adolescents with depression tend to have negative thoughts from cognitive distortions, stressful life events and physiological conditions that are significantly greater than adolescents without depression (Marton, Churchard & Kutcher, 1993). Many studies also find that there was a significant relationship between depression and cognitive distortion among unmarried pregnant young women which among them are Nasir et.al. (2016) and Abdullah, Salleh, Mahmud, Ahmad & Ghani, (2011). Nasir et.al. (2011) also claim that cognitive distortion is one of the depression predictors among adolescents. Depression can cause a person to feel worthless, guilty, or ashamed of their limitations, have low self-efficacy and low self-esteem as well as external locus of control (Wardle et al. 2004). It is clear that out-of-wedlock pregnant young women suffer from depression and cognitive distortion which in turn lead to various psychological, emotional and physical problems.

Therefore, this study aims to identify the needs of depression and cognitive distortion module that can be used for the out-of-wedlock pregnant women in shelter homes.

### Module in Shelter Homes

Rusell (1974) defines a module as a teaching package related to one unit of subject. It is an individual teaching effort that allows a student to master one unit of content before moving on to another unit. Kamdi (1990) in Mohd Noah and Ahmad (2005) defines a module as a teaching and learning package complete with teaching and learning components such as objectives, learning materials and activities, assessment activities and systematic instructions and procedures. The module is to guide students to master a learning unit and can be a self-study module where students can learn on their own. Meanwhile, Mohd Noah and Ahmad (2005) explains that a module is a teaching and learning unit that discusses certain topics systematically and sequentially to facilitate students to learn on their own in a process of them mastering the learning unit.

In general, the module used in shelter homes for out-of-wedlock pregnant woman in this country emphasises on the basics of fardu ain and fardu kifayah with an intention to attend to the moral issues (Ahmad, Mustaffa, Jusoh & Arip, 2009). Unwed teenagers who are placed in Taman Seri Puteri Cheras, Selangor and Taman Seri Puteri Batu Gajah, Perak are presented with the basics of fardu ain and fardu kifayah as treatment either to the perpetrators or the victims of sexual behaviours (Ahmad et. al. 2009). Raudhatus Sakinah in Selangor gives attention to spiritual guidance such as fardu ain, al-Quran, hadiths, aqidah, morals, prayers, and the history of the prophets as treatment to trainees who take shelter under the institution (Ahmad et. al. 2009). Apart from spiritual activities, these shelter homes also provide some side activities to the trainees. There are shelter homes that offer vocational classes such as sewing and handicrafts, outdoor activities, religious classes, work placements and volunteer work which are usually run by volunteers (Saim et.al., 2013).

However, previous studies have shown that there are some weaknesses in the implementation of activities in women's shelter homes in the country (Azizi Yahaya et.al., 2010). For example, a study at four shelters homes located in Selangor, Pahang, Negeri Sembilan and Perak found that there were weaknesses in the implementation of moral education programs in these shelters. The activities implemented are not according to current needs, the same activities are repeated, uninteresting and even dull (Azizi Yahaya et.al., 2010). There are also competency development programs such as sewing, cooking and handicraft training that involve outside agencies, but are conventional, not comprehensive and fail to address the needs of pregnant adolescents (Mohd Azam, 2017).

In the context of this country, there are several researchers who build modules for those involved in sexual misconducts. For example, Ghani, Latif, and Khan, (2014) who have introduced 'sayangKU' (MyLove) module which is "an instrument to assist adolescents that involved in premarital sexual activity". The module is based on the Islamic perspective covering four aspects which are love of god (Allah), love of the prophet, love of self, and love of the ummah (world). Ahmad et. al. (2009) on the other hand, introduce AMAR module specifically to address issues related to sexual misconducts among Muslim students that contains eight strategies based on the Al-Ghazali Model namely greatness of Allah, revenge of hell, reasoning, socializing restrictions, sensory limitations, aurat limitations, choosing a friend and self-responsibility.

It can be said that all modules used in shelter homes are related to spiritual approach (Ahmad et. al. 2009), which is a very noble effort to bring these adolescents back to religious obedience. However, researchers have yet to find a specific module related to depression and cognitive distortion problems among out-of-wedlock pregnant adolescents. This is supported by Nasir et.al. (2015; 2016) who recommend that out-of-wedlock pregnant young women should be given appropriate interventions to reduce their depression levels. Saim, Mona, Malin, & Mehdi (2013) also suggest that intervention activities should focus on socio-cognitive and socio-emotional skills as well as other needs to drive psychological rehabilitation and social reunification of trainees. Therefore, it is necessary to conduct this study to identify the needs for a specific module for depression and cognitive distortion management for trainees in shelter homes.

### ■ 3.0 METHODOLOGY

This research uses a descriptive quantitative design. Descriptive research enables researchers to organize, summarize, and describe observations (Donald, Lucy & Chris, 2010). Surveys were used to collect the data of this research. The participants were selected using a purposive sampling method. This needs analysis involves 42 samples. 30 of them were former trainees of the shelter homes who had completed training and had been in the shelter for at least four months, and 12 of them were managers or teachers who had direct contacts with out-of-wedlock pregnant women of five shelter homes. The study was conducted from January to March 2020.

According to Richey and Klein (2007), the strength of module design and module development studies is, they are conducted specifically to solve problems in a specific context. Need analysis is a systematic evaluation process in providing useful information about a targeted population (McKillip, 1987). The needs analysis phase shows important information in providing guidance on the design and development of essential materials in the next phase (Gagne, Wager, Golas, & Keller, 2005). Meanwhile, according to Mohd Noah and Ahmad (2005), needs analysis is one of the steps in the first stage of module draft development. The information obtained from the needs analysis will determine whether there is a need for module development. If needs are identified, then the module development process can continue. In this research, need analysis was conducted to obtain accurate information on the issues of depression and cognitive distortion

among out-of-wedlock pregnancy women. This research also focuses on the needs of problem-solving interventions by developing and testing the effectiveness of the module.

The questionnaire was constructed by the researchers based on identified constructs which were depression and cognitive distortion variables. Both variables were identified from the previous researches showing out-of-wedlock pregnant women suffer from depression and cognitive distortion problem leading to other psychological problems. Once the variables were identified, a set of questionnaires with 20 items representing five general themes was developed.

The questionnaire consists of three parts. Section A concerns the respondents' background, Section B is about the five identified themes namely (i) general perception of mental well-being (2 items), (ii) general perception of depression (4 items), (iii) general perception of cognitive distortion (4 items), (iv) the needs for depression and cognitive distortion guidance programs (4 items), and (v) the needs for a structured module of depression and cognitive distortion (6 items). Section C needs to be answered only by the managers of the shelter homes. This part contains open-ended questions about the modules implemented in their shelter homes. The questionnaire uses a 4-point Likert scale: 1 - Strongly Disagree, 2 – Disagree, 3 – Agree, and 4 – Strongly Agree.

Data were analysed using Statistical Program Package for Social Sciences (SPSS) version 20.0 to obtain mean, standard deviation, percentage and frequency scores. The mean score interpretations were as follows: (1) 1.00 until 2.50 (Disagree and Not Necessary) and (2) 2.51 until 4.00 (Agree and Very Necessary).

#### ■ 4.0 RESULTS

Table 1 shows that average mean was high at 3.30. This result was obtained from the mean of managers which is 3.37 and the mean of former trainees which is 3.23. This shows that both managers and former trainees have a high consensus with this analysis. The higher score was 'The need for a structured module of depression and cognitive distortion' theme with average mean was 3.55. This indicates that both managers and former trainees agreed that structured depression and cognitive distortion management modules need to be developed to help the out-of-wedlock pregnant women to manage depression and cognitive distortion effectively as well as to improve their mental well-being.

**Table 1.** Mean and standard deviation for each themes

Themes	Managers N = 12		Former Trainees N = 30		Average Mean	Interpretation
	Mean	SD	Mean	SD		
General perception towards mental well-being	3.33	0.39	3.63	0.29	3.48	Agree and Very Necessary
General perception towards depression	3.21	0.36	2.90	0.58	3.06	Agree and Very Necessary
General perception towards cognitive distortion	3.04	0.32	2.70	0.72	2.87	Agree and Very Necessary
The need for a depression and cognitive distortion guidance programs	3.67	0.46	3.40	0.52	3.54	Agree and Very Necessary
The need for a structured module of depression and cognitive distortion	3.58	0.39	3.51	0.46	3.55	Agree and Very Necessary
Average	3.37	0.38	3.23	0.51	3.30	Agree and Very Necessary

The second highest mean score was 3.54 for 'The need for a depression and cognitive distortion guidance' theme. This shows that trainees need to be exposed to depression and cognitive distortion management activities more frequently and they need professional guidance during the training period at the shelter homes. The third highest mean score was 'General perception of mental well-being' theme with a mean of 3.48. This shows that both managers and former trainees agreed on the importance of mental well-being among out-of-wedlock pregnant women.

However, there is a clear difference in scores for 'General perception of cognitive distortion' theme between managers and former trainees. The mean score for the managers was 3.04 while the mean score for the former trainees was 2.70. Scores for 'General perception of depression' theme also show differences in which managers were found to score a mean score of 3.21 while former trainees scored a mean score of 2.90. The results show that the managers agreed that there are trainees who have depression and cognitive distortion symptoms in the shelter homes and sadly they were not able to manage both depression and said symptoms properly. The symptoms shown by the trainees were influenced their emotions and behaviors toward themselves and others.

Figure 1 shows that 97% of respondents agreed with 'The need for a structured module of depression and cognitive distortion' theme which has the highest score. This theme consists of six questions, and all show high scores. 100% respondents agreed with 'a cognitive distortion management module for out-of-wedlock pregnant women in shelter home should be created to further enhance the mental well-being of the trainees' item, 98% of respondents agreed with 'a depression management module for out-of-wedlock pregnant women in shelter home should be created to further enhance the mental well-being of the trainees' item, 98% of the respondents agreed with 'depression management programs or activities should be designed according to the current needs of the trainees' item and 98% of the respondents agreed with 'cognitive distortion management programs or activities should be designed according to the current needs of the trainees' item.

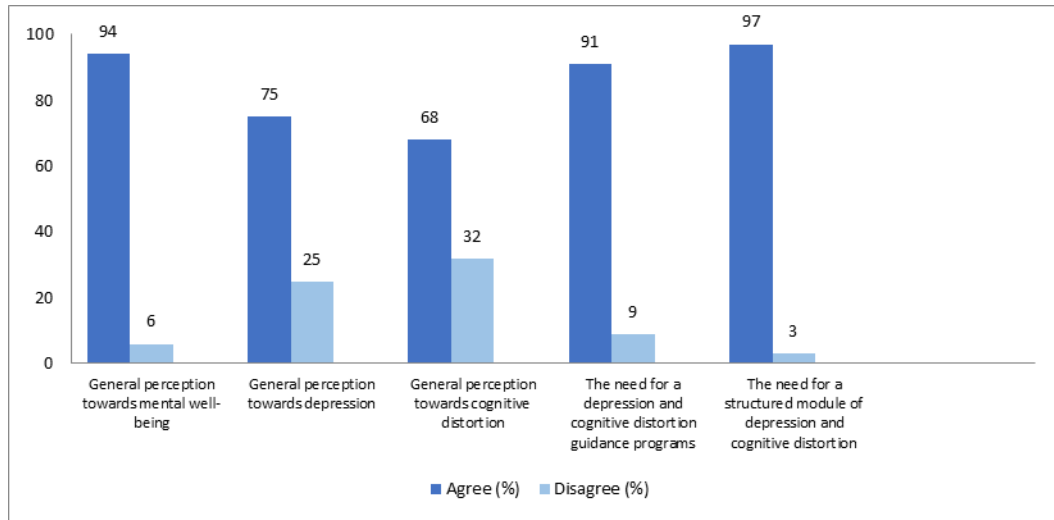


Figure 1. Percentage (%) of each themes

93% of the respondents agreed with ‘in my opinion, a structured module will help trainees to manage depression more effectively’ item and 93% respondents agreed with the item ‘in my opinion a structured module will help trainees to manage cognitive distortion more effectively’. All six items show high scores (93-100%) indicating that respondents agreed for the development of a structured depression and cognitive distortion management module appropriate to the current needs to improve mental well-being among out-of-wedlock pregnant women in shelter homes.

The ‘General perception of mental well-being’ theme represents the second highest percentage of 94%. 100% of respondents agreed with the ‘mental well-being among trainees (out-of-wedlock pregnant women in shelter homes) is important to give attention to’ item. This shows that both managers and former trainees agreed that mental well-being is an important factor that every trainee needs to pay attention to. ‘The need for depression and cognitive distortion guidance programs’ theme also shows a high percentage of 91%. In this theme, the ‘trainees need to be exposed to depression management programs or activities more often while in the shelter home’ item and ‘trainees need to be exposed to cognitive distortion management programs or activities more often while in the shelter home’ item scored high and equal scores (98%). This indicates that programs or activities related to depression and cognitive distortion management are important and should be disclosed more frequently to trainees.

Next, for ‘General perception of depression’ theme, 76% of the respondents agreed with ‘the trainees do not know how to manage depression properly’ item. As for the ‘General perception of cognitive distortion’ theme, 67% of the respondents agreed with the ‘the trainees do not know how to manage cognitive distortion properly’ item. These scores indicate that there is a need to provide coaches with accurate information on how to manage depression and cognitive distortion properly for out-of-wedlock pregnant women in shelter homes. The questionnaire also contains Section C that needs to be answered only by managers of the shelter homes. This part consists open-ended questions about the modules implemented to trainees in their shelter homes. The findings show that three out of five shelter homes involved in this study used their own modules developed by the management itself, which are Development Module, Istitabah Module and Trainee Learning Module. Meanwhile, the other two shelter homes stated that no modules were used for the trainees.

Development Module was designed for trainees to acquire both world and hereafter knowledge for life guidance. This module was used in religious classes conducted daily. Istitabah Module is in the form of rehabilitation that involves spiritual activities such as prayer, zikir and recitation of the holy Al Quran and doa. Meanwhile, Trainee Learning Module contains ten sub-modules, namely Al Quran (memorizing verses), Tajwid, Jawi, Aqidah, Ibadat, Munakahat, Muamalat, Jenayat, Hadith and Akhlak (morals). These sub-modules were presented to trainees through theoretical and practical learning sessions. Written, oral and practical tests were also conducted to trainees every month. The study found that most of the activities were religious and spiritual with the aim of bringing the trainees to return to obey Allah, practise the religious knowledge and live life according to syariah.

## 5.0 DISCUSSION AND RECOMMENDATION

Findings show that both managers and former trainees agreed that depression and cognitive distortion among out-of-wedlock pregnant women are important issues to pay attention to. Depression and cognitive distortion that are not well-managed will affect both mother and baby. Babies born to untreated depressed women are at risk of premature birth, low birth weight, and impaired intrauterine growth. In addition, it can also affect the development of the child. Higher impulsiveness, inappropriate social interactions as well as cognitive, behavioral, and emotional deviations also occur. The adverse effects of untreated maternal depression can also harm the mother. Importantly, pregnant women who suffer from depression are more at risk of postpartum depression and suicide (Justin, Aniket, Adrienne, & Gideon, 2014).

Depression may occur because of cognitive distortion, the experience of stressful life events, and psychological levels. Subsequent from the cognitive aspect, a person will become depressed when considering themselves worthless (Lau, S., Chan, D. W., & Lau, P. S., 1999). Depression and cognitive distortion that are not treated properly can have a direct impact on the mother. It can negatively affect the women’s self-esteem and their function as a mother. They are unable to carry out their responsibilities as a mother perfectly and behave negatively (Gonidakis & Leonardou, 2008). This can cause the baby and the family to be neglected and in turn affect the harmony and



well-being of the family. Furthermore, as mention by Mohamed (2001), untreated depression will affect a person's ability to perform daily responsibilities and tasks as it is related to emotional problems and the human condition. Depression symptoms not only cause psychological problems to the individual who suffers from it but also to the harmony and functionality of a family (Margerat, David, Ruth, Lori & Lee, 2001). Even more sadly, infants from depressed mothers are also at risk of being harmed by their mothers, disrupted healthy relationships, and ultimately leading to a tendency to commit suicide or kill the infant (Perfetti, Clark & Fillmore, 2004). Appropriate assessment and treatment are needed because depression is often associated with behavioral problems such as anger, irritability and hostility of adolescents that are often considered "normal" performed by such groups (Ray et.al., 2007).

Unmarried pregnant young women are convinced that there is no future and no hope for them, which is the result of distorted thinking. This is related to greater social phobias and negative expectations for social interaction (Nasir et. al., 2016). If cognitive distortion occurs frequently, it can lead to psychological distress or disorders (Sharf, 2016). This will have a profound effect on them and if left untreated, it will have a greater impact on their future. Cognitive distortion has been identified to play an important role in emotional disorders. This is evidenced by studies on the role of cognitive distortion not only on depression (Yüksel & Bahadır-Yilmaz, 2019; Kube et.al., 2019), but also on anxiety disorders (Kuru et.al., 2018), stress disorders (Iacoviello & Charney, 2020), antisocial behaviour (Demeter & Rad, 2020), drug use (Kirisci et.al., 2004) and sexual offenses (Paquette et.al., 2020). Therefore, individuals with cognitive distortion (in the context of this study are out-of-wedlock pregnant adolescents) should be immediately assisted so that the problem of cognitive distortion does not lead them to such emotional disorders.

Therefore, it is important that both depression and cognition distortion be taken seriously in an effort to help out-of-wedlock pregnant adolescents to become healthier mentally, emotionally and behaviorally. For that purpose, this needs analysis was conducted. This study found that there is a need to develop specialized modules to help trainees in the shelter homes to manage these issues. Most of the available modules do not undergo scientific and systematic research. In fact, the modules only focus on religious and spiritual activities where the management believes that trainees should repent of sins or wrongdoings and be brought back to practice religious beliefs. However, the researchers do not deny the importance of the matter.

Hence, the module should be developed based on research that emphasizes on the importance of mental well-being among out-of-wedlock pregnant women especially in managing depression and cognitive distortion more effectively. Cognitive behavioral therapy is seen as the most appropriate way of transforming thoughts from negative, distorted, or unrealistic thinking patterns to normal (Nasir, Zamani, Yusoooff & Khairudin, 2010). According to Nasir et.al. (2010), this restructuring and modification of thinking can help reduce the negative effects experienced by the trainees. Cognitive behavioral therapy focuses on helping clients to identify dysfunctional thoughts as well as dysfunctional emotions and behaviors to transform those dysfunctional thoughts into healthier thoughts, to adjust and thus form healthier emotions and behaviors (Porter, 2014). Therefore, this approach is expected to be able to control the issue of depression and cognitive distortion among out-of-wedlock pregnant adolescents.

## ■ 6.0 CONCLUSION

This research contributes to exploring the need to develop a depression and cognitive distortion structured module for out-of-wedlock pregnant adolescents by considering their needs. Future research should focus on the program development process by conducting surveys on appropriate development psychoeducation modules and the application of appropriate theories as the basis for the development of depression and cognitive distortion management module. The effectiveness of the module should also be considered to ensure that pregnant adolescents in shelter homes are assisted to manage the issue of depression and cognitive distortion. This research has the limitation that the sample does not include the entire population of out-of-wedlock pregnant adolescents in Malaysia. This is because, the samples of the study consisted of Malay ethnic who are or have been trained in the shelter homes only. Samples does not include the private shelters that placed other ethnic residents including out of wedlock pregnant adolescents who have never been to any shelter homes. Future researchers who are interested in continuing studies on out-of-wedlock pregnant adolescents may be able to focus on cross-cultural aspects so that diverse research results can be obtained.

## Acknowledgment

Our sincere appreciation to the managers of the shelter homes involved and the brave former trainees for the cooperation given. The author(s) received no financial support for the research, authorship, and/or publication of this article.

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