

A STUDY ON DEPRESSION AND COGNITIVE DISTORTION AMONG OUT-OF-WEDLOCK PREGNANT YOUNG WOMEN IN MALAYSIA

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Abstract

The percentage of out-of-wedlock pregnancies increases dramatically every year. This matter needs to be taken into account as it results in negative effects, especially from a mental and emotional point of view which can ultimately affect the human capital of the country. This study aims to identify the level of depression and cognitive distortion among out-of-wedlock pregnant young women. This study used quantitative methods of collecting data in which the Beck Depression Inventory for Malays (BDI-Malay) and the Inventory of Cognitive Distortion (ICD) questionnaires were distributed to respondents. A total of 70 out-of-wedlock pregnant young women who were in nine shelters across the country had participated in this study. The results show that depression was at a mild level and cognitive distortion was at a moderate level. In addition, the levels for the dimensions of depression namely cognitive/affective and somatic/vegetative as well as the dimensions of cognitive distortion namely externalization of self-worth, fortune telling, selective abstraction, dichotomous thinking, magnification, minimization, perfectionism, comparison to others, emotional reasoning, arbitrary inference, and personalization were also obtained. The study also found a significant positive linear relationship between depression and cognitive distortion ($r = 0.578$, $p < 0.05$). Appropriate intervention methods have also been suggested in the final section of this paper.

Keywords: Depression, Cognitive distortion, Out-of-wedlock pregnant young women

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1.0 INTRODUCTION

Through the 11th Malaysia Plan (RMK11), the government is committed to empowering the human capital development to make Malaysia a developed country that depends on the people. The goal set by the government through the Malaysian Youth Policy 2015 is to "strengthen and highlight the potential of youth human capital as a driver of strategic development in the future guided by the Federal Constitution and National Pillars" (Ministry of Youth and Sports, 2015). However, this noble desire is difficult to implement and achieve if the young people of this country continue to be involved in various moral problems including out-of-wedlock pregnancies which in turn results in psychological problems such as depression and cognitive distortion which will be discussed in this study. Out-of-wedlock pregnancy means pregnancy as a result of sexual intercourse between a man and a woman outside of a legal relationship in terms of religion and national law (Ismail, 2017). In developing countries, there are at least 10 million unwanted pregnancies among adolescent girls aged between 15 and 19 years (WHO, 2020).

The issue of out-of-wedlock pregnancy is not new in this country. Malaysia's National Registration Department (JPN) records reveal that 159,725 illegitimate births were registered nationwide for three years starting in 2013 (Ahmad, 2016). Most of the women involved in the issue of out-of-wedlock pregnancy are young people aged between 14 and 35 years (Nen & Hashim, 2020; Samsuddin, et al., 2019; Saim, et al., 2019; Shahrudin, et al., 2018; Azam, 2017; Nordin, et al., 2012;) which are national assets or upholstery to future leaders and this issue is seen as worrying because it can affect the development of the country's human capital in the future. This is due to the fact that the issue of out-of-wedlock pregnancy generates stress from a variety of angles, including family conflict, psychological stress, financial hardship, difficulty with academics, and interference from ex-boyfriends (Nen, 2020). Due to the lack of social support from family and community members, this has also contributed to the psychological impacts on the group of unmarried mothers, such as sadness, loneliness, difficulty in making decisions, and involvement in drug abuse (Wan Ismail, 2011). Various factors are found to be the cause of the involvement of young people in sexual misconduct that leads to out-of-wedlock pregnancies.

In the situation of this country, unmarried pregnant women will be ridiculed, looked down upon and marginalized by family members because they are considered to have tarnished the good name of the family (Nasir et al., 2016). This is because Malaysians believe that out-of-wedlock pregnancy is an immoral act. This perception is not only agreed upon by this country but by most other Asian societies, among which are Indonesia (Butt & Munro, 2007; Fadhilah, 2020), the Philippines (Medina, 2001), Singapore (Rahman, 2009), Korea (Jin, Oh & Kim, 2007) and Japan (Gagné, 2012). These countries see the phenomenon of unmarried mothers as destroying the value of a family (Saim, 2013). Therefore, usually unmarried mothers will try to keep their pregnancy a secret. Since the pregnancy of unmarried mothers is also associated with shame and dignity, it is customary for parents or families to place unmarried mothers in shelters to hide their condition from society (Saim, Sarnon & Tsuey, 2021). The issue of out-of-wedlock pregnancy for young people has various negative impacts such as increased cases of abortion, health problems due to being too young, health problems of babies born, financial problems, and conflicts in

family institutions (Siong & Tharshini, 2020). This group is at high risk of experiencing various problems from a physical, emotional, and psychological point of view and if not dealt with immediately can lead to the tragedy of suicide (Dove & Miller, 2007).

Previous studies have proven that out-of-wedlock pregnant young women who are in shelters face depression (Agnafors et al., 2019; Samsuddin, et al., 2019; Nasir, et al., 2015, 2016; James-Hawkins, et al., 2014; Wan Ismail, 2011; Wardle et al., 2004) as well as cognitive distortion (Nasir et al., 2011, 2015, 2016). According to the World Health Organization (WHO), depression is defined as a common mental disorder that exhibits characteristics such as loss of pleasure or interest, sadness, low self-esteem or guilt, sleep disturbances, changes in appetite, feeling tired, and lack of concentration. In critical cases, depression has the potential to be the cause of suicide (WHO, 2016). On the other hand, cognitive distortion is defined as an inaccurate way of placing or giving meaning to experiences that occur in life (Barriga et al., 2000). The underlying reason why young women who are pregnant out-of-wedlock placed in shelters experience depression and cognitive distortion has not yet been determined. However, based on previous studies, getting pregnant at a young age indeed causes this group to face the risk of depression and cognitive distortion. This is supported by the statement of Hodgkinson et al. (2010) who stated that being pregnant at a young age is difficult to accept because most are not ready to take on the responsibility and role of a mother. In fact, this group is exposed to numerous risks of stress, depression, and anxiety due to the lack of psychological and mental preparation and the surrounding society's lack of acceptance (Hodgkinson et al., 2010). Knight et al. (2006) also agrees that individuals involved in out-of-wedlock pregnancies are easily affected from a mental, emotional, and psychological point of view. In addition, the results of the study by Nasir et al. (2016) also found that there is a relationship between depression and loneliness among unmarried pregnant women in shelters. Among the reasons why individuals face the risk of loneliness while in shelter institutions are because they are rarely contacted or able to communicate with family members, do not have friendly relationships with other residents and only have one close friend in the institution (Siti Marziah et al., 2013).

Depression results in low self-efficacy, low self-esteem, feelings of worthlessness, external locus of control, and shame or guilt over their limitations (Wardle et al. 2004). In addition, recurrent and poorly managed cognitive distortions result in individuals no longer being able to plan their lives well resulting in depression, anxiety, or other psychological disorders (Sharf, 2019; Beck, 2011). Therefore, the various negative effects faced by these out-of-wedlock pregnant young women need to be serious attention by looking at the extent of the effects they face such as depression and cognitive distortion which these factors believed to lead to even worse things such as abortion and the potential for suicide (Lasgaard, Goossens, & Elklit, 2011). Accordingly, through this study, profiles of young women who are pregnant out of wedlock and who are currently in shelters were collected along with the information about their level of depression and cognitive distortions. This allows statistical intervention and future prevention plans to be made.

Research Objectives

The research objectives are as follows:

- i. to identify the level of depression
- ii. to identify the level of cognitive distortion
- iii. to identify the correlation between depression and cognitive distortion

2.0 LITERATURE REVIEW

Out-of-wedlock Pregnancy

Out-of-wedlock pregnancy means pregnancy before marriage which involves sexual intercourse between two people, a man and a woman who do not have a legal bond (Alavi et al., 2012). This includes sexual intercourse that occurs voluntarily, or by force such as rape or incest (Saim et al., 2013). According to Zakaria and Zulkifli (2017), many adolescents are involved because of the problems surrounding them such as broken families, history of sexual abuse by family members, pornography addiction and involvement in extramarital sexual activities. Such factors can be linked to voluntary or forced activities when the victim is raped and defiled to satisfy the perpetrator's lust (Saim et al., 2013). The study also found that most cases of teenage pregnancy involve young women between the ages of 15 and 17 years which occur as a result of sexual relations with people they know, including boyfriends (Abdullah et al., 2014).

In general, unmarried mothers have lower income and education levels and are more dependent on welfare assistance compared to married mothers (Lichter et al., 2003; Terry-Humen et al., 2001; Driscoll et al., 1999). Pregnancy at a young age is also difficult to accept as these young women are not yet ready to take on the responsibility of being a mother. Furthermore, the lack of preparation from the psychological and mental aspects as well as negative acceptance among the community causes this group vulnerable to the risk of stress, depression, and anxiety (Hodgkinson et al., 2010). This group is also affected mentally, emotionally, and psychologically (Knight et al., 2006). The issue of out-of-wedlock pregnancy in Malaysia is considered a worrying situation because a considerable number of cases was registered at the Malaysian Health Clinic from 2014 to 2018. A total of 3,980 cases were registered in 2014, 3,980 cases in 2015, 3,938 cases in 2016, 3,694 cases in 2017 and 2,873 cases in 2018 (Majid et al., 2020).

In Asian culture, out-of-wedlock pregnancy is a misconduct and brings shame and dishonour to the family. For example, women who give birth before marriage are considered an oddity based on traditional Thailand culture (Piyant Sa-ngiamsak, 2016). While in the Philippines, unmarried women must adhere to traditional customs, which is to remain virgins and naive in sexuality (Medina, 2001). According to a study conducted in Malaysia by Saim et al. (2013), out-of-wedlock pregnant young women in this country are not accepted by the local community and most families use shelters as a measure to hide them to avoid embarrassment. In fact, disconnection, or lack of contact with family members puts these young women at risk of depression after childbirth (Saim et al., 2013). As a remedial measure, the pregnant individuals are advised either to marry the father of the baby, have an abortion or give the baby to an adoptive family (Rains, 2009). Rehabilitation or protection centres are also options to hide the pregnancies from public knowledge (Rains, 2009).

Depression and Cognitive Distortion among Out-of-wedlock Pregnant Young Women

Depression is identified as the most prevalent mental disorder that affects most countries in the world, whether developed or developing countries (WHO, 2017; WHO, 2012; Yee & Lin, 2011). The results of the World Health Organization (WHO, 2017) report on the global

health survey in 2015 have found that globally the number of individuals suffering from depressive mental disorder in the world is 322 million people. Almost half of that number consists of people from Southeast Asia (27%) and the Western Pacific region (21%) (WHO, 2017). Cases of depression are identified as the most frequently reported mental disorder in this country (Muhktar & Oei, 2011). As for cognitive distortion, it is recognised as errors in human thinking when making a statement or a claim (Ward et al., 2006) in which an individual gives an inaccurate meaning to an experience (Barriga et al., 2000). In other words, cognitive distortion is an error in an individual's thinking caused by biased or incorrect information processing (Yurica & DiTomasso 2005). Cognitive distortion will affect an individual's internal state or misbehaviour (Briere, 2000).

There are several theories that predominate the study of depression in the discipline of psychology. Among these are cognitive behavioural theory (CBT), self-control theory, interpersonal theory, and behavioural theory (Bernaras et al., 2019; Merry et al., 2012). However, to date, CBT is the most widely used and well-supported intervention for depression among youth (Muhktar & Oei, 2011; Weersing & Gonzalez, 2009). According to Beck (1963), depressed people experience disturbances in the information-processing stage of their minds, which results in a persistently pessimistic outlook on themselves, the future, and the world. It is thought that these cognitive contents and processes underlie affective behaviour and potentially trigger depressive symptoms. Meanwhile, the literature on cognitive therapy and depression has inspired the idea of cognitive distortion (Maruna & Mann, 2006). Cognitive distortion, according to Beck (1967), is the result of erroneous ways of thinking about the information being processed. According to Sharf (2019), when thinking is often distorted, individuals will experience difficulty in living and planning life better and are driven to experience depression, anxiety or other psychological disorders.

Studies have found that giving birth at a young age is associated with symptoms of postpartum depression (Agnafors et al., 2019). There are several factors that cause this situation. First, the young mother needs to take care of herself and at the same time take care of the newborn baby. Second, motherhood at a young age is associated with low levels of education and income (Geronimus et al. 1994). High levels of depressive symptoms among adolescents are associated with unintended pregnancies. A study shows that depression has a role in unplanned pregnancy among young adolescent girls (James Hawkins et al., 2014). Logan et al. (2007) also found that unintended births can harm the mother's mental well-being and general psychological well-being.

Previous studies have proven that out-of-wedlock pregnant young women who are in shelters face depression problems (Agnafors et al., 2019; Samsuddin et al., 2019; Nasir et al., 2015, 2016; James Hawkins et al., 2014) and cognitive distortion (Nasir et al. 2011, 2015, 2016). Changes in terms of biological, physical appearance, and psychological will be experienced by pregnant individuals, especially if the pregnancy is unplanned and unwanted as experienced by this group. They are usually not prepared in terms of psychology, social acceptance, and economic responsibility to face the world of parenthood. Problems of depression and cognitive distortion should be addressed immediately because if not resolved it will hurt academic performance and relationships with peers and family members (Christner and Walker, 2007). Moreover, without proper treatment, the adult life of these adolescents will also be affected (Gillham & Reivich, 1999).

■ 3.0 METHODOLOGY

Research Design

This is a quantitative study using a questionnaire. Before the study was conducted, the researcher had made an application to obtain approval from the Department of Social Welfare (JKM) and the shelters involved. Respondents were asked to sign informed consent before participating in the study. This study is conducted from January to March 2022.

Population and Sampling

A non-probability sampling design (purposive sampling) was used in this study because the data were collected from a specific intended group (Bougie & Sekaran, 2019), namely out-of-wedlock pregnant young women placed in shelters. Of the nineteen shelters contacted, nine had agreed to participate. Another ten shelters could not participate due to several reasons such as time constraints, characteristics of trainees that did not fit the scope of the study and some of them were no longer in operation. The study sample consists of 70 out-of-wedlock pregnant young women between the ages of 14 and 30. The shelters were either under the management of the Social Welfare Department (government), statutory organizations (semi-government) or non-governmental organizations throughout Malaysia. Respondents who face learning problems, cannot read, and write and are over 30 years old were not included in this study.

Measures

In this study, the researcher used a set of questionnaires containing three parts to collect data. Part A consists of the demographic information of the respondents, Part B consists of the Beck Depression Inventory for Malays (BDI-Malay) developed by Firdaus Muhktar and Tian Po Oei (2008) and translated and adapted to the Beck Depression Inventory (BDI). Part C is The Inventory of Cognitive Distortion (ICD) developed by Yurica and DiTomasso (2002). For demographic questions, there are four questions, the name of the shelter, the age of the respondent, the length of stay in the shelter, and the state of origin of the respondent. BDI-Malay is a translated version of the BDI that has 21 items that indicate the level of depression. However, this instrument has been adapted by the researcher by keeping the original 20 items and removing the last item which is the item 'loss of libido' because it is not suitable to be included in the existing domain and is not in line with the culture and religion of the local community i.e., the Asian community (Muhktar & Oei, 2008). The item 'loss of libido' also showed a weak relationship with depression (Zheng & Lin, 1991). The 20 items of the BDI-Malay are divided into two sub-constructs, namely cognitive/affective which consists of 14 items, and somatic/vegetative which consists of six items. BDI-Malay has a Cronbach's alpha value of 0.91. Respondents were asked to answer questions related to their feelings during the past week. The score shows four levels of depression which are minimal (score 0 to 9), mild (score 10 to 18), moderate (score 19 to 29), and severe (score 30 to 63) (Choplin et al., 2020).

The Inventory of Cognitive Distortion (ICD) is a 69-item of self-report instrument used to measure specific types of cognitive distortions (Yurica & DiTomasso, 2002). It includes 11 subscales representing 11 different types of cognitive distortions extracted by factor analysis. The ICD obtained a .98 Cronbach's alpha value. Taking into account the respondent's ability to understand each item as well as the constructs that are appropriate to community samples (non-clinical samples) (Roberts, 2015), the 69 ICD items were modified by the researcher to a short form scale to avoid fatigue and boredom when answering the questions by deleting duplicated items under the same construct and kept 48 items with 11 sub-constructs including externalization of self-worth, fortune telling, selective abstraction, dichotomous thinking, magnification, minimization, perfectionism, comparison to others, emotional reasoning, arbitrary inference, and personalization. The ICD instrument has been translated into Malay through a back-to-back translation process (Lu Xi, 2015). Respondents were asked to rate on a five-point Likert scale from "0=Never" to "4=Always". The score range is between 0 and 192. The score shows three levels of cognitive distortion, namely low (score 0 to 63), moderate (score 64 to 128), and high (score 129 to 192). For this study, both BDI-Malay and ICD instruments were reviewed by two language experts.

■ 4.0 RESEARCH FINDINGS

Demographic Information

Table 1 shows the demographic information of the respondents. There are three types of shelter administration in Malaysia, namely those run by the government, statutory bodies, and non-governmental organizations (Saim et al., 2021). Of the nine shelters involved in this study, three shelters are operated by the government through the Department of Social Welfare (JKM) and three shelters are under the category of non-governmental organizations. The other three shelters are under the auspices of the Selangor Islamic Religious Council (MAIS), the Federal Territory Islamic Religious Council (MAIWP) and the Malacca Islamic Religious Department (JAIM). They are in the category of statutory bodies. All these shelters are registered and supervised by the Department of Social Welfare (JKM).

The study was conducted from January to March 2022 involving 70 trainees. Only two shelters have more than ten trainees, Shelter 1 in Johor with 22 trainees (31.4%) and Shelter 2 in Selangor with ten trainees (14.3%). Seven other shelters recorded less than ten trainees. Shelter 8 and 9, both located in Kuala Lumpur, recorded the lowest number of trainees which was three people (4.3%), respectively. Most of the trainees were between the ages of 17 and 20 years, 31 people (44.3%), followed by those between the ages of 21 and 25 years, 18 people (25.7%). Most of them (38.6%) were in shelters for less than three months.

Table 1: Demographic Information (n=70 respondents)

Demographic Information	Frequency (f)	Percentage (%)
Shelters		
Shelter 1 (Johor)	22	31.4
Shelter 2 (Selangor)	10	14.3
Shelter 3 (Sarawak)	9	12.9
Shelter 4 (Selangor)	7	10.0
Shelter 5 (Perak)	6	8.6
Shelter 6 (Kelantan)	5	7.1
Shelter 7 (Melaka)	5	7.1
Shelter 8 (Kuala Lumpur)	3	4.3
Shelter 9 (Kuala Lumpur)	3	4.3
Age		
14 – 16	12	17.1
17 – 20	31	44.3
21 – 25	18	25.7
26 – 30	9	12.9
Period of stay in the shelter		
0 – 3 months	27	38.6
3 – 6 months	12	17.1
6 – 9 months	10	14.3
More than 9 months	21	30.0

Figure 1 shows the state of origin of the trainees at the shelters. The data shows that Johor and Selangor recorded the same and the highest percentage of 18.6%, followed by Sarawak with 12.9%, then Kelantan and Perak with the same percentage of 8.6%. The study shows that the trainees from Kuala Lumpur and Sabah were the fewest, each having only one trainee, which is 1.4%.

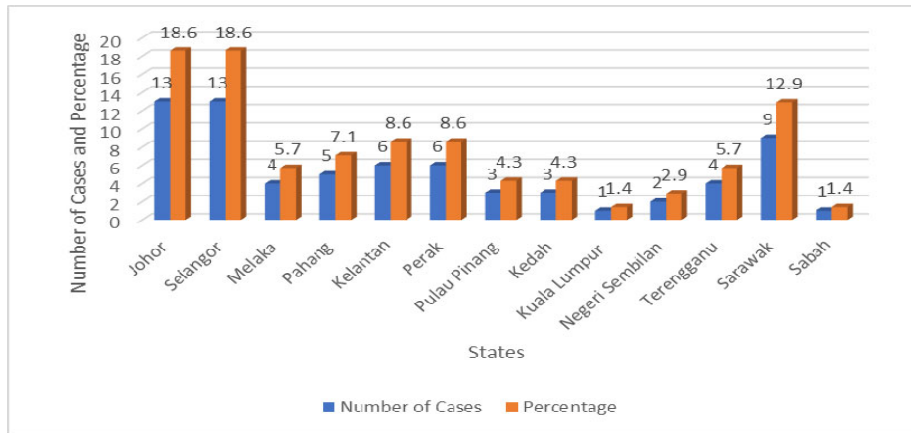


Figure 1: Number of Cases and Percentage by State of Origin of Respondents

The Level of Depression and Cognitive Distortion

Table 2 shows the reliability analysis carried out for both instruments. It was found that the Cronbach Alpha value for the Beck Depression Inventory-Malay (BDI-Malay) was 0.89 while for the Inventory of Cognitive Distortion (ICD), it was 0.96. The high-reliability value of both instruments reveals that they are suitable to be used as research instruments for this study. The mean value of the BDI-Malay, which is 0.93 indicates that the respondents are in a mild level of depression. Meanwhile, the mean value of the ICD, which is 1.82 shows that the respondents are in a moderate level of cognitive distortion.

Table 2 : Reliability coefficient Analysis for the Beck Depression Inventory-Malay (BDI-Malay) and the Inventory of Cognitive Distortion (ICD)

Instrument	Number of Item	Cronbach's Alpha	Mean	SD
Beck Depression Inventory-Malay (BDI-Malay)	20	0.89	0.93	0.92
The Inventory of Cognitive Distortion (ICD)	48	0.96	1.82	1.25

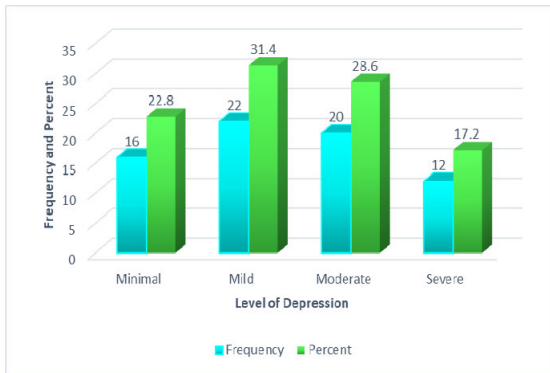


Figure 2: Level of Depression

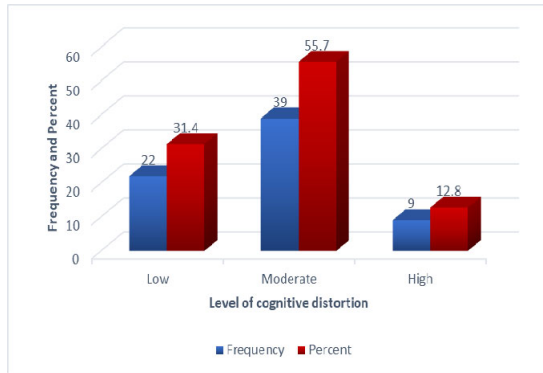


Figure 3: Level of Cognitive Distortion

Both Figure 2 and Figure 3 show more comprehensive data about the level of depression of trainees and the level of cognitive distortion based on the frequency and percentage of cases. Figure 2 shows that 31.4% of trainees are at a mild level of depression followed by 28.6% at a moderate level, 22.8% are at a minimal level and another 17.2% are at a severe level of depression. Meanwhile, Figure 3 shows that more than half of the trainees are at a moderate level of cognitive distortion (55.7%), followed by 31.4% who are at a low level and another 12.8% are at a high level of cognitive distortion.

The Level of Each Dimension of Depression and Cognitive Distortion

Table 3 : Level of Each Dimension of Depression

Dimension of Depression	Level								Mean
	Minimal		Mild		Moderate		Severe		
	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)	
Cognitive/Affective	14	20.0	22	31.4	21	30.0	13	18.6	0.96
Somatic/Vegetative	18	25.7	19	27.2	22	31.4	11	15.7	0.82

Table 3 shows the level for each dimension of depression. The mean value for the Cognitive/affective dimension is 0.96 while the mean value for the Somatic/vegetative dimension is 0.82. The mean value of Cognitive/affective dimension shows that it is at a moderate level (mean 0.95-1.45) while the mean value of Somatic/vegetative dimension shows that it is at a mild level (mean 0.50-0.94).

Table 4 : Level of Each Dimension of Cognitive Distortion

Dimension of Cognitive Distortion	Level						Mean
	Low		Moderate		High		
	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)	
Externalization of Self-worth	16	22.8	32	45.7	22	31.4	2.11
Fortune Telling	36	51.4	24	34.3	10	14.3	1.52
Selective Abstraction	25	35.7	37	52.9	8	11.4	1.62
Dichotomous Thinking	27	38.6	34	48.6	9	12.8	1.64
Minimization	30	42.9	25	35.7	15	21.4	1.62
Emotional Reasoning	27	38.6	19	27.1	24	34.3	1.92
Comparison to Others	15	21.4	29	41.4	26	37.2	2.20
Arbitrary Inference	23	32.8	35	50	12	17.2	1.72
Personalization	19	27.1	31	44.3	20	28.6	2.05
Magnification	31	44.3	31	44.3	8	11.4	1.44
Perfectionism	18	25.7	21	30	31	44.3	2.34

Table 4 shows the level for each dimension of cognitive distortion. There are 11 dimensions assessed in the Inventory of Cognitive Distortion (ICD) which describe the three levels of cognitive distortion, namely low (mean 0.00-1.30), moderate (mean 1.31-2.70) and high (mean 2.71-4.00). The data show that all 11 dimensions were in the moderate level where the highest mean was 2.34 for Perfectionism dimension, followed by Comparison to Others with 2.20, Externalization of Self-worth with 2.11 and Personalization with 2.05. The lowest mean was 1.44 for Magnification and the second lowest mean was Fortune Telling with 1.52. The third lowest mean was shared by two dimensions, namely Selective Abstraction and Minimization with a value of 1.62.

The Correlation between Depression and Cognitive Distortion

Table 5 : Correlation Between Variables

Demographic Information	Depression	Cognitive Distortion
Depression	-	.578**
Cognitive Distortion	.578**	-

Note: **p<0.05

Table 5 shows a significant correlation between depression and cognitive distortion with correlation coefficient values $r = 0.578$ and $p < 0.05$. Krehbiel (2004) states that the correlation value needs to be ± 1 to prove statistical significance which depends on the sample size. This study has a sample size of 70 people. According to the Correlation Coefficient Rule of Thumb table (Krehbiel, 2004), for a sample size of $n=70$, the coefficient value should be ≥ 0.239 proving that there is a significant linear relationship between related variables. Therefore, in this study, the value of the coefficient $r = 0.578$ shows a significant positive linear relationship between depression and cognitive distortion.

5.0 DISCUSSION AND RECOMMENDATIONS

This study was able to collect 70 respondents from nine shelters. This figure is seen slightly low in number compared to previous in-country studies related to out-of-wedlock pregnancies (Saim et al., 2019; Shahrudin et al., 2018). Future studies are expected to involve more trainees so that the data obtained is more extensive. The study conducted from January to March 2022 found that the largest group or 38.6% of trainees stayed at the shelters for less than three months. At that time, Malaysia was preparing for the endemic phase where state and national borders began to open and standard operating procedures (SOPs) were not as strict as before (after two years of dealing with Covid-19 since 2019). This gives hope for the number of the trainees in shelters to increase so that more young people of this group can be helped physically, mentally, and spiritually. Regarding the state of origin of the trainees, it was found that the trainees came from 13 different states. The data shows that Johor and Selangor recorded the same and the highest percentage of 18.6%, followed by Sarawak with 12.9%, then Kelantan and Perak with the same percentage of 8.6%. The findings are slightly different from the statistics obtained by the

Department of Social Welfare which show the five states that recorded the highest number of out-of-wedlock pregnancy cases were Sabah, Sarawak, Selangor, Johor, and Pahang (*Berita Harian*, 2018).

As for the research instruments used, the study showed that the Cronbach Alpha value for the Beck Depression Inventory-Malay (BDI-Malay) was 0.89 while for the Inventory of Cognitive Distortion (ICD) it was 0.96. This high value shows that both instruments are suitable for use in this study. This value also proves that the research instrument is in line with the research objective and the respondents can understand each item well. As mentioned by Noah (2002), the higher the number of items representing a concept or factor, the higher the reliability value. Although the finding shows that each item can be understood well by all respondents, for future studies, it is recommended that the researcher obtain information about the educational background of the respondents to further strengthen the findings of the study. The mean value of the BDI-Malay was 0.93 which indicates that the respondents were in a mild level of depression. For each dimension of depression, the mean value for Cognitive/affective dimension was 0.96 while for the Somatic/vegetative dimension, it was 0.82. This mean value demonstrates that both dimensions are at a mild level (mean 0.00-0.99). The mean value was very close to the mean value for the moderate level (1.00-1.99) which signals the tendency for the respondents to be at the moderate level. Although 31.4% of trainees were at a mild level of depression, the number was closely followed by a moderate level at 28.6%. The figure shows that 22.8% of trainees were at a minimal level while another 17.2% were at a severe level of depression. Next, the mean value of the ICD was 1.82 which indicates that the respondents were at a moderate level of cognitive distortion. The study shows that more than half of the trainees were at a moderate level of cognitive distortion with 55.7% followed by 31.4% at a low level and another 12.8% at a high level of cognitive distortion. The data show that all 11 dimensions of cognitive distortion were at moderate levels. Therefore, module developers or people carrying out the intervention activities can use the data of this study as a guide where the focus should be on the types of distortions that obtain high scores such as Perfectionism, Comparison to Others, Externalization of Self-worth and Personalization.

The relatively high numbers especially for severe and very severe depression and high levels of cognitive distortions indicate that depression and cognitive distortions among young women who are pregnant out-of-wedlock in shelters do exist and something needs to be done to help them manage the psychological problems that they face. Young people who suffer from depression tend to think negatively of themselves because of cognitive distortions, stressful life events, physiological conditions and cognitive aberrations that are significantly greater than young people who do not suffer from depression (Marton et. al. 1993). Thus, young women who are pregnant out-of-wedlock experience depression and cognitive disorders which can lead to various psychological, emotional, and physical problems.

The study also found that there is a significant linear relationship between the two variables involved, namely depression and cognitive distortion with correlation coefficient values of $r = 0.578$ and $p < 0.05$. A positive value indicates that the higher the level of depression, the higher the level of cognitive distortion of a person and vice versa. Previous studies have shown that there is a significant relationship between depression and cognitive distortions among young unmarried pregnant women (Nasir et al. 2016; Abdullah et al. 2011) and cognitive distortion as a predictor of depression for this group (Nasir et. al. 2011). This suggests that individuals suffering from depression tend to experience cognitive distortions and both psychological problems need to be addressed so that the trainees in the shelters are not affected mentally, emotionally, and physically which will indirectly interfere with their daily lives.

The Cognitive Behavioural Therapy (CBT) approach is seen as synonymous with the problems experienced by individuals who are pregnant out-of-wedlock, which are depression and cognitive distortion. The CBT approach is important in trying to rehabilitate adolescents involved in sexual misconduct by restructuring their thinking ability to control their antisocial behaviour (Bakar et al., 2019). CBT is a form of therapy that is structured and has structured instructions (Beck, 2011). In keeping with the limited time, CBT has a specific agenda or goal for each session. The consistency of this structure facilitates generalization by providing a formula that clients can use even outside of session time. This shows that the CBT techniques taught during the training period at the shelters can continue to be used by the trainees independently when they have completed the training. Thus, this therapy can be considered by policymakers or module developers to address the problems of depression and cognitive distortion faced by out-of-wedlock pregnant young women in Malaysia. Through this approach, the level of depression and cognitive distortion of these young women can be brought down to a lower level. As a result of decreased levels of depression and cognitive distortion, these young women will be more motivated and ready to live their next life and gain better psychological well-being.

■ 6.0 CONCLUSION

Depression is closely related to emotional and mood problems and if it is not treated it will affect a person's ability to perform daily responsibilities and tasks. Depression is a disorder or a type of mental illness that affects one's physical, emotional, and mental well-being. It is not temporary in nature and not something that can be terminated and eliminated by mere desire but needs to be treated with the help of experts. Therefore, depression has a negative effect on the individual and more serious observation is needed to stop it from continuing until it can interfere with the individual's life function. Errors in the thinking process or also known as cognitive distortion can also have many adverse effects on those who suffer from it. When features of cognitive distortion frequently appear or occur, this can lead to various psychological stressors including depression. Inferring from behaviour is an important part of human functioning, thus, individuals must monitor what they do and evaluate possible future outcomes to make plans for their social lives, relationships, and careers. When cognitive distortion occurs frequently, individuals are no longer able to plan their lives well and may experience depression, anxiety, or other psychological disorders.

This study shows that out-of-wedlock pregnant young women in shelters experience depression and cognitive distortions. Although the number of those at a very severe or high level was low when compared to the number of those at a low or moderate level, this finding cannot be ruled out. Young women who are pregnant out-of-wedlock need support and encouragement from society as well as their family members. Cooperation from all parties can help the management of the shelters better and the trainees themselves in managing the depression and cognitive disorders they face. The findings of this study however have limitations. The study sample does not represent the entire population of pregnant women out of wedlock in Malaysia because the majority of the sample consists of Malays who are in shelters only, not including private shelters that accommodate most young women who are not Malays such as Chinese and Indians. They are unmarried pregnant women who are not housed in shelters. Future researchers are suggested to conduct cross-cultural studies so that

comparisons of levels of depression and cognitive distortions can be made. In addition, this study only measured two variables, namely depression and cognitive distortion. Future studies are suggested to add other variables related to mental well-being so that this group can be helped towards better mental health to face wider life challenges, especially after completing training at the shelter.

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***Dedication:**

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