

Category of Inmates, Duration of Incarceration and Depression as Determinants of Suicidal Ideation among Prison Inmates in Ibadan, Nigeria

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Suicidal ideation is the thought of one taking one's life or thinking about suicide without actually making plans to do so. It is currently one of the major problems in the society. Statistics have shown that the rate of suicide has been on the increase especially among prison inmates worldwide. In this study, therefore, the influence of category of inmates, duration of incarceration and suicidal ideation among prisons in Ibadan, Nigeria was examined. Two hundred and ninety-seven inmates (290 males and 7 females) in Agodi prison in Ibadan were accidentally sampled. A structured questionnaire consisting of socio-demographic, depression ($\alpha = 0.81$) and suicidal ideation scales ($\alpha = 0.86$) was used for data collection. Data was analysed using independent t-test and analysis of variance at $p = 0.05$. Results show that category of inmates had a significant influence on suicidal ideation [$t(295) = 4.846, p < 0.05$]. The convicted inmates scored higher on suicidal ideation ($M = 29.00$) than those awaiting trial ($M = 23.45$). Also, depression had a significant influence on suicidal ideation [$t(295) = 2.36; p < 0.05$]. Inmates who are depressed scored higher on suicidal ideation ($M = 25.98$) than inmates who are low on depression ($M = 22.93$). However, duration of incarceration in prison had no significant influence on suicidal ideation among the inmates sampled. The study shows that rather than the duration of incarceration in prison, category of inmates and depression were the most influential factors that influence suicidal ideation among the inmates in Agodi prison in Ibadan, Nigeria. Policy implications are proffered.

Keywords: Category of inmates, duration of incarceration, depression, suicidal ideation, Ibadan, Nigeria

Introduction

Suicidal ideation is the thought of wanting to take one's own life or thinking about suicide without actually making plans to commit suicide (Favril, Laenen, Vandeviver, Audenaert, 2017). It could also be taken as the thought that life is not worth living, ranging in intensity from fleeting thoughts through to concrete, well-thought-out plans for killing oneself, or a complete preoccupation with self-destruction (Winicov, 2019). However, in this paper, the term suicidal ideation refers to having the intent to commit suicide, including planning how it will be done.

The World Health Organisation (WHO, 2014) identifies suicidal ideation as a significant social and mental health concern in many countries. Generally, suicide has been ranked as the leading cause of death worldwide, taking toll on global public health (Naghavi, 2019). The prevalence of suicide tends to be higher in African countries in the east and south compared to those in the north and west (Backmann, 2018).

Research on suicidal ideation in Africa is an emerging issue. WHO (2016) Global Health Observatory reported Lesotho to have the highest suicide rate (28.9%) and Morocco the lowest (3.1%) in Africa. The same report put Nigeria as

having an age standardised suicide rate of 17.3% per 100,000 in 2016, which placed it as the 7th country with a high rate of suicide in Africa. Studies conducted on suicidal behaviour in sub-Saharan Africa indicate that it is a public health problem among adults and youths which deserve immediate attention. For example, Adewuya, Ola, Coker and Atilola (2018) assessed the prevalence of suicidal ideation and associated factors among the general population in Lagos State. They found in a sample of 11, 246 that the weighted prevalence of suicidal ideation in Lagos was 7.28% (S.E. 0.27). There have also been some studies conducted in western countries regarding risk factors for suicidal behaviour (Favril *et al.*, 2017; Boren, Folk Loya, Tangney, Wilson & Barboza, 2018; Naghavi, 2019), but it cannot be assumed that those same risk factors will apply to youth in sub-Saharan African countries including Nigeria.

Therefore, it is important for more studies to be done to determine the determinants of suicidal ideation in sub-Saharan African countries so that an accurate assessment of the country's specific and regional situation may be known and appropriate action taken (Orjiakor Ugwu, Eze, Ugwu, Ibeagha & Onu, 2017).

Some factors have been indicated as determinants of suicidal ideation. Suicidal ideation could be triggered by depression (Al-ma'ani, 2015). Over 60 percent of persons who died by suicide suffer from major depression. Major depression is the psychiatric diagnosis most commonly associated with suicide. Lifetime risk of suicide among patients with untreated depressive disorder is nearly 20% (Pompili, 2019). About two-thirds of inmates who committed suicides were depressed at the time of their deaths.

In a study conducted in Flander, Belgium, Favril *et al.* (2017) found out that 43.1% of the inmates reported having suicidal ideation compared to 20.3% of inmates who have attempted suicide while in incarceration. Also, 23.7% of both awaiting trial and convicted prisoners reported having experienced suicidal ideation during their current incarceration. This was attributed to their psychiatric diagnoses with the history of attempted suicide, having unique prison experience such as lack of working activity, exposure to suicidal behaviour by other inmates, low levels of perceived autonomy, safety and social support (Favril *et al.*, 2017).

Also, about 7 out of every 100 men and 1 out of every 100 women who have been diagnosed with depression at some time in their lifetime will go on to complete suicide (Quinto, 2017). The risk of suicide in Major Depressive Disorder is about 20 times that of the general population. Individuals who have had multiple episodes of depression are at a greater risk for suicide than those who have had one episode. People who show dependence on alcohol or drugs in addition to being depressed are also at a greater risk for suicide. In a Nigerian study, Adewuya *et al.* (2018) found a very high relationship between depression and suicidal ideation. In another study comparing the level of depression between categories of inmates (awaiting trials and convicted inmates) at a federal prison in Abeokuta, southwest Nigeria, Majekodunmi, Obadeji, Oluwole & Oyelami (2017) found that those inmates awaiting trials were more depressed than convicted inmates.

Duration of incarceration in the prison is another trigger of suicidal ideation among inmates. Some inmates acquire suicidal ideation when they are unable to cope with the stress of confinement (WHO, 2014). At the initial period of incarceration, the stress can be limited to the fear of unknown and isolation from the family members. However, as the period of incarceration extends, the stress factors become exacerbated to include loss of relationships, conflict within the prison environment, victimisation by the other inmates, legal frustration, physical and emotional breakdown (Oyeleke, Tanga & Ishola, 2018). As the inmates reach this emotional breaking point, suicidal ideation develops in them. Cohen and Taylor (1972) did the earliest and most criticised studies about imprisonment. They suggested that long term inmates have obsessive fear due to imprisonment. However, in Favril *et al.*, (2017) a negative relationship between the duration of incarceration and suicidal ideation for inmates who have stayed in the prison for less than one year, was observed. That is, the possibility of experiencing suicidal ideation was more observed in inmates who have been incarcerated for one year or less. This explains why inmates who have been incarcerated for less than one year show significant higher risk of experiencing suicidal ideation compared to inmates who have been incarcerated for more than one year.

Researchers who studied the psychological effects of imprisonment searched for uniform effects across inmates in general (Haney, 2012). At an individual level, prison effects can be conceived as the multiple ways in which inmates are changed or affected as a result of their incarceration (Haney, 2012). Research has also attempted to examine the differential impacts of imprisonments on individual inmates or subpopulations, such as 'lifers' or those who attempt suicide (Smyth *et al.*, 1994). These studies have suggested that imprisonment is not as detrimental as first thought and could also have some positive effects on inmates. Bonta and Gendreau (1990), for instance found little evidence to support the conclusion that long-term imprisonments necessarily have detrimental effects on the inmates.

The third trigger of suicidal ideation among inmates is the category of inmates in prison. Inmates on remand, that is, those awaiting trial or sentencing – as well as those already serving sentences in penitentiaries have extremely high rates of suicide compared to the general population. The World Health Organisation (WHO) states that those awaiting trial are $7^{1/2}$ times more likely to attempt suicide and those already sentenced are six times more likely to attempt suicide than the general population (WHO, 2014). The rates of actual suicide are hard to gauge because of the transient nature of the prison population.

A Canadian study estimated the rate of incarceration to be at least twice (but can be as high as ten times) than that of the general adult population (Correctional Services of Canada, 2016). The next largest group who die by suicide are those sentenced prisoners in federal custody who are sentenced to two or more years of imprisonment. They are usually between 30-35 years old and would have been incarcerated for five or more years. They are generally violent offenders who have had a precipitating factor (e.g. conflict with prison authorities, loss of loved ones, or denial of parole) combined with other risk factors causes them to take their lives (Correctional Services of Canada, 2016).

Since suicidal attempts and ideas are borne out of traumatic events, an insight into the possible triggers of suicidal ideation should be carried out among individuals with history of traumatic events such as prison inmates. It is against this backdrop

that this study sets out to investigate factors such as category of inmates (convicted inmates and awaiting trial inmates), duration of incarceration in prison and depression as determinants of suicidal ideation among inmates in Nigeria.

Research question

The research question that guided this study is: would category of inmates, duration of incarceration and depression influence suicidal thoughts among prison inmates?

Significance of the study

This research will contribute to knowledge and extend the previous studies on suicidal ideation in prison as the relationship that exist between the category of inmates (convicted inmates versus awaiting trial inmates), duration of incarceration and depression as determinants of suicidal ideation among prison inmates in Nigeria was examined. Moreover, this study would be of benefits to researchers who are interested in the problems affecting inmates. Policy makers in government will also benefit from the study as the factors that promote suicidal ideation among inmates will be highlighted in it for them to improve on the prison system, thus making inmates to have sense of belonging and feel protected so as to prevent them from preoccupying their minds with suicidal ideation. Four hypotheses were tested in this study.

1. Prison inmates who are convicted will significantly report a higher rate of suicidal ideation than prison inmates who are awaiting trials.
2. Prison inmates who are highly depressed will significantly report a higher rate of suicidal ideation than prison inmates who are low on depression.
3. Prison inmates who have been incarcerated longer than ten years in prison will significantly report a higher rate of suicidal ideation than prison inmates who have been incarcerated below ten years.
4. Prison inmates who are convicted and have stayed below one year will significantly report a higher rate of suicidal ideation than prison inmates who are awaiting trials, those who have been incarcerated 1-5 years, 6-10 years and above 10 years and above.

Methods

Design

In this study, a cross-sectional survey design was adopted. This allowed the researcher to make relevant and specific description of the characteristics of the population. The aim of the study was to examine the influence of categories of inmates, duration of incarceration and depression on suicidal ideation among inmates in Agodi prison in Ibadan. The population of the study comprised both male and female prison inmates in Agodi prison, Ibadan.

Sample

The sample was drawn from the population of 1022 inmates from the Agodi prison, Ibadan, Oyo State. A sample size of 298 inmates was obtained from the population using Macorr sample size calculator using 95% confidence level and 5% margin of errors.

Instruments

A structured questionnaire consisting demographics, depression, and suicidal ideation scales were used to collect relevant data from the participants in the study. Demographic variables consist of participants' gender, religion, marital status, age, tribe, category of inmates, and duration of incarceration.

Depression was measured with a 20-item scale developed by Zung (1965). It is a self-reported depression scale and is rated on 4-point Likert format ranging from 1= a little of the time to 4=most of the time. Sample items include: 'I feel down hearted and sad', and 'I still enjoy the things I used to do'. The score ranges from 20 - 80. Participants that scored 50-69 were classified as depressed. The author reported Cronbach's alpha of 0.81. This Cronbach alpha for this study is 0.79.

Suicidal ideation was measured with a 10-item scale developed by Rudd (1989). It is rated on 5-point Likert's format ranging from 1=Never to 5=Always. Item includes: 'I have been thinking of ways to kill myself', and 'I have come close to taking my own life'. Rudd (1989) reported Cronbach's alpha of 0.86. The Cronbach's alpha for this study is 0.87.

Data collection procedure

The researcher visited the prison and was assisted by four wardens within the prison. During the visit to the prison, having obtained approval from the prison authority, the researcher was taken to the welfare department by the warden on duty. Afterwards, the senior warden in charge of the welfare department authorised the wardens on duty to visit both the convicted and the awaiting trial cells to bring the inmates out to the common room to meet with the researcher. The researcher sought the inmates' verbal consent and those that were willing to participate in the study were given the questionnaire to fill. Verbal instructions for completing the questionnaires were given to them. The researcher waited for each participant to complete their questionnaire which was collected on the spot. The process of data collection took three weeks. Two hundred and ninety-seven copies of the questionnaire were properly filled and were used for the analysis. Ethical approval was obtained from the Faculty of Social Sciences Ethical Committee, University of Ibadan, Ibadan.

Statistical analysis

After the data collection, the questionnaires were screened, scored and analysed using Statistical Package for Social Sciences (SPSS, Version 20). T-test of independent sample was used to test hypotheses 1 and 2. Analysis of variance was used to test hypotheses 3 and 4 at $p < 0.05$ level of significance.

Results

Table 1 shows the demographic details of the participants. As presented in Table 1, one hundred and thirty-three (44.6%) participants were Christians, 134(44.9%) were Muslims and 31(10.4%) were traditional religious practitioners. Sixty-eight (22.8%) participants had stayed below 1 year in prison, 118(39.6%) had stayed between 1-5 years in prison, 54(18.1%) had stayed between 6-10 years in prison, and 57(19.1%) participants had stayed above 10 years. Ninety-six (32.6%) participants were convicted and 201(67.5%) were awaiting trial. Seventy-one (23.8%) participants were low on depression and two hundred and twenty-seven (75.9%) were high on depression.

Table 1: Summary of the demographic variables of the participants

Variables	Frequency	Percentage
Sex		
Male	290	97.6
Female	7	2.4
Religion		
Christian	133	44.6
Muslim	134	44.9
Traditional	10	10.4
Length of stay		
Below 1 year	68	22.8
1-5 years	118	39.6
6-10 years	54	18.1
Above 10 years	57	19.1
Category of inmate		
Convicted	96	32.6
Awaiting Trials	201	67.4
Level of depression		
High	71	23.8
Low	227	75.9

Table 2: Summary of independent t-test showing mean difference between category of inmates and suicidal ideation

Category	N	M	t	df	p
Convicted inmates	96	29.00	4.846	295	<.01
Awaiting trial	201	23.45			

Table 2 shows independent t-test of mean difference between category of inmates and suicidal ideation. The result shows that category of inmates have a significant influence on suicidal ideation $t(295) = 4.846$; $p < .01$. Independent mean shows that convicted inmates scored higher on suicidal ideation ($M=29.00$) than inmates awaiting trial

($M=23.45$). Thus, hypothesis one which states that inmates who are convicted will significantly report a higher rate of suicidal ideation than inmates who are awaiting trial is accepted.

Table 3: Summary of independent t-test showing mean difference between depression and suicidal ideation

Depression	N	M	t	df	P
Low	71	22.93			
			2.361	295	<.05
High	226				

The result shows that depression had a significant influence on suicidal ideation ($t(295) = 2.36$; $P < .05$). Again, independent means t-test showed that highly depressed inmates scored higher on suicidal ideation ($M = 25.98$) than inmates who score low on

depression ($M = 22.93$). Thus, hypothesis two which states that inmates who are high on depression will report a higher rate of suicidal ideation than inmates who are low in ideation is accepted.

Table 4: Summary of one-way analysis of variance showing the influence of duration of incarceration on suicidal ideation

	SS	df	MS	F	P
Between Groups	274.514	3	91.505	1.001	>.05
Within Groups	26793.048	293	91.444		
Total	27067.562	296			

Table 4 is the summary of a one-way analysis of variance on the influence of duration of incarceration on suicidal ideation. As shown in Table 4, the duration of incarceration had no significant influence on suicidal ideation ($F(3, 293) = 1.001$; $P > .05$). Thus, hypothesis three which

states that prison inmates who have stayed longer than 10 years in prison will significantly report a higher rate of suicidal ideation than prison inmates who have stayed below one year, one to five years and six to ten years is rejected.

Table 5: Summary of 2x4 analysis of variance showing effect of category of inmates and duration of incarceration on suicidal ideation

Source	SS	df	MS	F	P
Categories	1710.699	1	1710.699	22.108	<.05
DoI	928.618	3	309.539	4.000	>.05
Category* DoI	2272.053	3	757.351	9.788	<.05
Error	22362.292	289	77.378		
Total	216411.000	297			

*DoI = Duration of Incarceration

As shown in Table 5, category of inmate had a main significant influence on suicidal ideation ($F(1, 289) = 22.108$; $P < .01$). Table 5 shows that duration of incarceration had no significant main effect on

suicidal ideation ($F(3, 289) = 4.000$; $P > .05$). Category of inmates and duration of incarceration had a significant interaction effect on suicidal ideation ($F(3, 289) = 9.788$; $P < .01$).

Table 6: Summary of mean scores of categories of inmate and duration of incarceration on suicidal ideation

		Duration of incarceration			
	Below 1 year	1-5years	6-10years	10 years & above	
Awaiting trial	23.68	21.29	24.60	27.44	
Convicted	36.68	29.70	22.41	28.64	

Table 6 shows the summary of mean scores of category of inmates and duration of incarceration on suicidal ideation. The result in Table 5 reveal that convicted inmates who have stayed below 1 year had a higher score on suicidal ideation (M=36.50) than those awaiting trial who have stayed below one year (M=23.68); those incarcerated for 1- 5 years (Convicted: M=29.70; Awaiting trial: M= 21.29); those incarcerated for 6-10 years (Convicted: M=22.41; Awaiting trial: M= 24.60); and those incarcerated for 10 years (Convicted: M= 28.64; Awaiting trial: M= 27. 44). Thus, hypothesis four which states that prison inmates who are convicted and have stayed below one year will significantly report a higher rate of suicidal ideation than prison inmates who are awaiting trial and have stayed below one year, one to five years, six to ten years and above ten years is, therefore, accepted.

Discussion

Results from this study show that depression has a significant influence on suicidal ideation. Inmates who are highly depressed scored higher on suicidal ideation than those low in depression. This finding supported Quinto’s (2017) and Majekodunmi *et al.*’s (2017) observation that depression tends to be the best predictor of suicidal ideation. Adewuya *et al.*, (2018) also found a high relationship between depression and suicidal ideation. Major depression is the psychiatric diagnosis most commonly associated with suicide. Lifetime risk of suicide among patients with untreated depressive disorder is nearly twenty percent. The result also shows that two-third of inmates who completed suicide were depressed as at the time of their death. Favril *et al.* (2017) found that 43.1% of the inmates reported having suicidal ideation compared to 20.3% of inmates who had attempted suicide while in incarceration in their study in Flander, Belgium.

The result also supported Daniel’s (2006) study who found out that depressive mood disorders were more closely related to suicidal ideation than to any other psychiatric condition.

The finding in this study also indicates that inmates who are convicted had a significant main effect on suicidal ideation and had significant interaction effect between category of inmates and length of stay in prison on suicidal ideation. However, duration of incarceration had no significant main effect on suicidal ideation. This finding supported the World Health Organisation finding that those awaiting trial are seven and a half times more likely to attempt suicide, and those already sentenced are six times more likely to attempt suicide than in the general population (WHO, 2014). According to Corrections Services Canada, the largest group who died by suicide are those already convicted, that is, those who have been sentenced for two or more years in federal prison (Correctional Services Canada, 2016).

Results from this study further reveal a significant influence of category of inmates on suicidal ideation. Convicted inmates had a higher rate of suicidal ideation than inmates awaiting trials. This supported CSC’s (2016) study that inmates on suicidal ideation had affirmed that the next largest group who dies by suicide are those sentenced prisoners in federal custody (who have been sentenced to two or more years of imprisonment). They are between 30-35 years old and have been incarcerated for five or more years. They are generally violent offenders who have had a precipitating factor (e.g. conflict with prison authorities, loss of a loved one, or denial of parole) combined with other risk factors, causing them to take their lives. Salive *et al.* (1989) projected a suicide rate in the Maryland prison system of almost three times that of the general population.

Although precipitating factors were not offered, in the study higher suicide rates were found among white inmates and those aged 25 to 34, convicted of personal crimes, and housed in a maximum security facility. In addition, while the length of actual time served by inmates who committed suicide varied widely, only 22 percent of the victims had sentences less than eight years, and almost 25 percent of all victims were serving life sentences.

Moreover, result from the one-way ANOVA indicates no significant effect of duration of incarceration on suicidal ideation because inmates that have stayed below one year only scored higher on suicidal ideation. This is supported by Favril *et al.* (2017) who found a negative relationship between duration of incarceration and suicidal ideation for inmates who have stayed in the prison for one year or less. However, some other researchers found that the inmates themselves did not see imprisonment as a fundamental threat to their psychological health (Naghavi, 2019) and that, they discovered, in fact, that there was an increase in verbal intelligence with imprisonment (Pompili, 2019). Despite these mixed opinions, studies which focus on the general psychological effects of imprisonment have mostly found that inmates experience the greatest difficulties at the beginning of their sentences (Oyeleke *et al.*, 2018).

Haney (2012) observed that long term prisoners have an obsessive fear of deteriorating due to imprisonment and that some inmates experience greatest difficulty at the beginning of their sentences. Earlier, Frottier *et al.* (2002) have shown the relationship between suicide risk and the duration of incarceration. They used sophisticated statistical methods to arrive at two different periods of high suicide risk: immediately after admission and two months for those awaiting trials. The risk correlated with the duration of incarceration.

In this study, depression, category of inmates and duration of incarceration were shown to have the great interaction on suicidal ideation among prison inmates in Agodi prison in Nigeria. Furthermore, category of inmates and depression were the major predictors of suicidal ideation among the study population. However, duration of incarceration in prison had no significant influence on suicidal ideation among inmates sampled. This study has, therefore, provided insight into some factors that affect suicidal ideation among prison inmates in a typical prison environment in Nigeria.

empirical evidence that illustrates what the Nigerian government need to address suicidal ideation among prison inmates is provided in this study.

Owing to a high prevalence of suicidal ideation among inmates, effort should be made by the government to prevent inmates from indulging in suicidal thinking. Although the generalisability of this study is limited to the prison inmates, the following suggestions are potent to prevent suicidal ideation and to promote early detection of suicidal ideation in this population.

First, clinical assessment of prison inmates should be done periodically by trained clinical psychologists. This will allow the authority to know the psychological state and well-being of the prisoners so that any of these inmates who are highly depressed can be detected at the early stage and appropriate measures taken to prevent such an inmate from having the thought of killing himself or herself.

Secondly, having observed that the highest population of the inmates are those awaiting trials, the government should expedite action on their trials so as to avoid keeping them in prison more than necessary. This is because the longer they stay in prison without trial, the more they feel rejected, forgotten and thus depressed which could aggravate to suicide thinking.

Thirdly, there have been unconfirmed reports that inmates are often subjected to humiliation by the prison staff (wardens). This act should be curbed so as to make the inmates feel protected. Humiliated inmates tend to be more depressed, thus triggering suicidal thoughts.

Finally, as controversial as it may sound, the government should provide central censored phone call units across all prisons in Nigeria so that the prison inmates could have access to making calls to their loved ones at home. This would make them feel happy, hopeful, and keep them away from being depressed.

This study is not without limitations. It involves the population of a particular prison in Nigeria, so the generalisability of the results is limited. Additionally, given the sensitive nature of the data collected in this study, it is possible that responses were affected by concerns for privacy, even though many steps were taken to ensure confidentiality. Inmates filled out survey instruments in the presence of their fellow inmates. As noted by some

researchers, a common concern of self-report data is social desirability, i.e., the bias in self-report data accounted for by respondent's desire to look good, where respondent craves for self-protection and social approval. Since the data for this study were collected using self-report questionnaires, the participants' responses may have been influenced by social desirability. This, in turn, might have influenced the independent variables on the dependent variable. In spite of these limitations, the findings in this study are still valid contributions to the understanding of factors influencing suicidal ideation among prison inmates.

Future research on suicidal ideation should include inmates across different prisons so that it would enhance generalisation and comparison of the results. Also, other variables like shame and guilt should be investigated in future studies.

References

- Adewuya, A. O., Ola, B. A., Coker, O. A. & Atilola, O. (2018) Prevalence and associated factors for suicidal ideation in the Lagos State mental health survey, Nigeria. *British Journal of Psychiatry*, 2(6): 385-389.
- Al-ma'ani, M. A. (2015) Suicidal ideation among patients suffering depression. *Middle East Journal of Psychiatry and Alzhemers*, 6(1): 12-14.
- Backmann, S. (2018) Epidemiology of suicide and the psychiatric perspective. *International Journal of Environmental research and Public Health*, 15: 1-23.
- Bonta, J. & Gendreau, P. (1990) 'Re-examining the Cruel and Unusual Punishment of Prison Life'. *Law and Human Behaviour*, 14(4): 347-372.
- Boren, E. A., Folk, B. J., Loya, J. M., Tangney, J. P., Wilson, S. J. & Barboza, S. E. (2018) Differences between inmates who attempt suicide: Staff-identified psychological and treatment-related risk factors. *Psychological Service*, 15(3): 349-356.
- Correctional Service Canada (CSC) (2016) Correctional Service Canada. Assessed 2 December 2019. <http://www.csc-scc.gc.ca/index-eng.shtml>.
- Daniel, A. E. (2006) Preventing suicide in prison: A collaborative responsibility of administrative, custodial, and clinical staff. *Journal of the American Academy of Psychiatry and Law*, 34: 165-175.
- Favril, L., Laenen, F. V., Vandeviver, C., Kurt Audenaert K. (2017) Suicidal ideation while incarcerated: Prevalence and correlates in a large sample of male prisoners in Flanders, Belgium. *International Journal of Law and Psychiatry*, 55: 19-28.
- Frottier, P., Fruhwald, S., Ritter, K., Eher, R., Schwarzler, J., Bauer, P. (2002) Jailhouse Blues revisited. *Social Psychiatry Epidemiology*, 37: 68-73.
- Haney, C. (2012) The psychological effects of imprisonment. *The Oxford Handbook of Sentencing and Corrections*. Online publication, 1-23.
- Majekodunmi, O. E., Obadeji, A., Oluwole L. O. & Oyelami, R. O. (2017) Depression in prison population: Demographic and clinical predictors. *Journal of Forensic Science & Medicine*, 3: 122-127.
- Naghavi, M. (2019) Global, regional, and national burden of suicide mortality 1990 to 2016: systematic analysis for the Global Burden of Disease Study 2016. *British Medical Journal*, 364, 194.
- Orjiakor, C. T., Ugwu, D. I., Eze, J. E., Ugwu, L. I., Ibeagha, P.N. & Onu, D. U. (2017) Prolonged incarceration and prisoners' wellbeing: livid experiences of awaiting trial/pre-trial/remand prisoners in Nigeria. *International Journal of Qualitative Studies on Health and Well-being*, 12: 1, 1395677.
- Oyeleke, A. I., Tanga, P. T. & Ishola, A. A. (2018) Jail duration, demographic characteristics of offenders, and acquired suicide capacity. *Journal of Psychology in Africa*, 28(1): 52-55.
- Pompili, M. (2019) Critical appraisal of major depression with suicidal ideation. *Annual General of Psychiatry*, 18: 7.
- Quintos, M. A. (2017) Predictors of suicidal ideation among the Filipino Youth. Findings from a nationally representative survey of Filipinos age 15 to 27. *Journal of multidisciplinary studies*, 6(2): 1-26.
- Salive, M. E., Smith, G. S. and Brewer, T. F. (1989) 'Suicide Mortality in the Maryland State Prison System, 1979 through 1987'. *The Journal of the American Medical Association*, 262(3): 365-369.
- Smythh, N. J., Ivanoff, A. & Jang, S. J. (1994) 'Changes in Psychological Maladaptation.
- Winicov, N. (2019) A systematic review of behavioral health interventions for suicidal and self-harming individuals in prisons and jails. *J.Heliyon*, 5.
- World Health Organisation (2014) *Preventing suicide in jails and prisons*. Geneva, Switzerland: WHO Document Production Services.
- World Health Organisation (2016) Global Health Observatory, Cited by African Check 2020 Suicide Report.
- Zung, W. W. (1965) A self-rating depression scale. *Archives of General Psychiatry*, 12: 63-70.