

## Health Promoting Behaviors of Persons Deprived of Liberty (PDLs) in Dumaguete City during COVID-19 Pandemic

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### *Abstract*

This study aimed to assess and identify the health promoting behaviors of Persons Deprived of Liberty (PDLs) in Dumaguete City during the COVID-19 pandemic in order to help the Bureau of Jail Management and Penology Dumaguete address PDLs' concerns regarding their health situations through enhanced implementation of BJMP's Improvement Plan. The study used quantitative design to know the significant relationship between the demographic profile and the health promoting behaviors of the respondents during COVID-19 pandemic. A total of 100 respondents participated in the research study, mostly coming from age ranging from 22 to 39 years old, the majority were male and were able to graduate from high school. Age may affect respondents' interpersonal relations as part of their health promoting behaviors during COVID-19 pandemic. Moreover, gender may affect the health-promoting behaviors of persons deprived of liberty concerning their nutrition and spiritual growth during the COVID-19 pandemic. This research study is significant to the nursing community to aid in improving and enhancing the various nursing care modalities within correctional or prison facilities. Ultimately, the results of this study will help enhance the Improvement Plan of the Bureau of Jail Management and Penology Dumaguete.

**Keywords:** *health promoting behaviors, persons deprived of liberty (PDLs), health situations, nutrition, spiritual growth*

### **Introduction**

**T**he COVID-19 pandemic has disproportionately harmed people incarcerated in prisons around the world. Prisons are such efficient super spreading environments due to a number of known factors, including small, communal facilities where people are confined for extended periods of time; poor ventilation; a lack of non-punitive areas for

quarantine/medical isolation; and staggeringly high numbers of people experiencing incarceration. As it is known, the COVID-19 virus can affect people from all walks of life, and persons deprived of liberty are no exception. Persons deprived of liberty, of different ages, gender, race, ethnicity, or social background can be affected by the virus. In light of these characteristics, a number of health organizations have provided recommendations on preventing COVID-19 infection and reducing dissemination in carceral settings. Therefore, this necessitates that health promotion should be observed within correctional or prison facilities to decrease or halt the transmission of the COVID-19 virus. As per protocols of the World Health Organization, wearing face masks, social distancing, and frequent handwashing are the gold standards in preventing the spread of the virus, and these should all be observed in carceral settings (Duarte *et al.*, 2022).

Given that Philippines "has the largest jail occupancy in the world," the case presents significant difficulties and potential psychological risks. According to early reports, numerous convicts and employees of the overcrowded prisons in the Philippines tested positive of COVID-19 virus infection. More than 700 PDLs have tested positive as of June 2020, and given their "locked away" state, lack of resources, and non-allegiance to minimum health standards, the PDLs and detainees "are the secret victims of the COVID-19 pandemic" and thus "invisibly vulnerable." The causes of covert health risks frequently result in complex mental problems that are linked to suicidal ideation. The fact that "social distancing is difficult within the jail, PDLs lacked adequate and nutritious food, and that only approximately a fourth of the detainees were wearing face masks" makes it necessary to pay more attention to the unreported COVID-19 deaths (Kahambing, 2021).

This is in spite of clear evidence that from the early 2000 to 2019, there was a "dramatic increase in the jail population and incarceration rate." Over time, it got even more crowded. Visitation rights have been suspended, and this has a psychological effect on the prisoners and their families. Visitation rights are still occasionally and carefully permitted in very special circumstances. As a question of life and death for both the public and the detainees, this case has repercussions for public health (Kahambing, 2021).

Institutions are closely related to unfavorable health consequences. The elderly and people with "pre-existing medical illnesses" (such as diabetes, high blood pressure, heart disease, or diseases of the respiratory system) are more susceptible to both TB and the coronavirus COVID-19 pandemic in jails. Because elderly PDLs are 'marginalized and vulnerable' in society, preventative methods, including partition management or relocation to approved hospitals, are advised. The U.N. High Commissioner for Human Rights, Michelle Bachelet, described PDLs as "particularly vulnerable populations" behind bars, a term that is essentially synonymous with "extreme vulnerability" (Kahambing, 2021).

The recent disinfection of the various buildings and cells of the City District Jail was approved by the Inter-Agency Task Force for the Management of Emerging Infectious Diseases, which Mayor Felipe Antonio Remollo led. In order to preserve zero cases of COVID among all those Deprived of Liberty, staff from the City Health Office deep cleaned and sanitized the whole jail compound. The male and female dormitories' jail wardens are currently under lockdown since the pandemic began, and Mayor Remollo are working closely to coordinate. The 14-day quarantine period is mandatory for jail guards both before and after they start their duties. The PDLs are also receiving multivitamins and other supplies from the City

Health Office in the meanwhile. Moreover, PDLs are being taught on the importance of wearing face masks, handwashing, and social distancing as much as possible to prevent the spread of COVID-19 inside the facility (GovPH, 2020).

Health promotion, according to the 1986 WHO Ottawa Charter for Health Promotion, is a “process of enabling people to increase control over and to improve their health”. Moreover, health promotion is a behavioral science encompassing the biological, physical, environmental, psychological and medical sciences to promote health and prevent disease (Chiu *et al.*, 2020). Furthermore, health-promoting behavior is already the end result or health outcome of a person utilizing the concept of health promotion. Hence, health-promoting behavior is a positive approach to living, well-being, or self-actualization.

In relation to the pandemic, health-promoting behaviors are continuously adapted and reinforced as time goes by up until now; that the Chinese authorities have reported a new strain of virus that originated in Wuhan City, Hubei province of China. This virus belongs to the coronavirus family and is responsible for certain illnesses ranging from the common cold to severe acute respiratory syndrome. This disease was named the coronavirus disease 2019, commonly known as COVID-19 (Ashgar, 2021).

Furthermore, it was made a public health emergency of international concern on January 30, 2020. The COVID-19 pandemic has then become the greatest challenge the world has faced since World War II. As of July 7, 2022, the World Health Organization had received reports of 550,218,992 confirmed cases of COVID-19, including 6,343,783 deaths globally. In the Philippines, there have been 3,711,268 confirmed cases of COVID-19, with

60,622 deaths, according to the World Health Organization and Department of Health. As of May 19, 2022, the Provincial Health Office (PHO) of Negros Oriental reported a total caseload of 23,456, broken down into 22,803 recoveries and 741 deaths (Partlow, 2022). In Dumaguete City, Negros Oriental, on October 27, Dr. Maria Sarah Talla, the City Health Officer, reported that all persons deprived of liberty and jail officers in the city have been vaccinated against COVID-19. This is to ensure the safety of the persons deprived of liberty within the facilities of the Bureau of Jail Management and Penology Dumaguete. There were no active COVID-19 cases confirmed by the Local Task Force in both male and female dormitory due to strict compliance with health protocols for both prisoners and jail officers. Dumaguete City Jail Male Dorm Warden J/Supt. Jonairry Sitchon said that to prevent transmission of COVID-19 inside the facilities, even the changing of guards every 14 days is heavily regulated. At the same time, those who completed the home quarantine will enter the facility as lock-in personnel, said Sitchon, explaining the revolving shift system (Tilos, 2021).

With the advent of COVID-19, the aforementioned external factors within correctional or prison facilities reinforce the importance of health-promoting behaviors to prevent and halt the transmission of the virus within these facilities. This current research study aimed to assess and identify the health-promoting behaviors of persons deprived of liberty in Dumaguete City during the COVID-19 pandemic.

***Statement of the Problem***

This study aimed to assess, identify and correlate the health-promoting behaviors of persons deprived of liberty (PDLs) in Dumaguete City during COVID-19 pandemic. With these considerations in mind, the researchers aimed to specifically answer the following questions:

1. What is the demographic profile of the respondents in the study, in terms of:
  - 1.1. Age;
  - 1.2. Sex; and
  - 1.3. Educational attainment?
2. What are the health-promoting behaviors of persons deprived of liberty (PDLs) during COVID pandemic, among these areas:
  - 2.1. Health responsibility;
  - 2.2. Physical activity;
  - 2.3. Nutrition;
  - 2.4. Interpersonal relations;
  - 2.5. Spiritual growth; and
  - 2.6. Stress management?
3. Is there a significant relationship between the profile and the health-promoting behaviors of PDLs during COVID-19 pandemic?

**Methodology**

To achieve the purpose of this study, the researchers employed the descriptive-correlational study research design to identify the health-

promoting behaviors of persons deprived of liberty (PDLs) in Dumaguete City during COVID-19 pandemic using a self-made questionnaire as the main data-gathering instrument. The objective of this study was to correlate the following variables: health-promoting behaviors of persons deprived of liberty (PDLs) and their demographic profile.

This research study was conducted in Bureau of Jail Management and Penology Dumaguete at Bajumpandan, Dumaguete City. The Bureau of Jail Management and Penology Dumaguete has a separate dormitory for male and female PDLs.

The questionnaire was based on the review of related literature and studies specifically on professional books and journals. To test the reliability of the questionnaire, it was pilot tested at Negros Oriental Provincial Jail. The PDLs were freely given the opportunity to answer the questionnaire based on their experiences regarding their health-promoting behaviors. During the initial pilot testing, numerous areas failed to meet the acceptable margin using Cronbach's Alpha. As a result, the researchers revised the questionnaire and conducted another pilot testing at the Negros Oriental Provincial Jail. Using the same statistical test, majority of the areas of the survey questionnaire on the second pilot testing were able to reach the acceptable margin. However, some areas did not reach the margin, prompting the researchers to restate the questions once again and referred the final survey questionnaire to the statistician. The improved survey questionnaire was then adopted and was used in the final administration after its reliability has been ascertained.

Participants were asked to write their responses using the scale below:

Scale	Interval	Verbal Description	Interpretation (Based on how frequent they adhere to health promoting behaviors)
4	3.25 - 4.00	Routinely	Done daily on a weekly basis
3	2.50 - 3.24	Often	Done 3-5 times on a weekly basis
2	1.75 - 2.49	Sometimes	Done 1-2 times on a weekly basis
1	1.00 - 1.74	Never	Does not do it on a weekly basis

The researchers employed a non-probability sampling in the form of snowball sampling. The researchers have opted to do a snowball sampling technique due to the restrictions mandated by the DOH and IATF regarding the COVID-19 pandemic. The inclusion criteria in this research study are those PDLs who were proven guilty by the court for committing a crime and those detainees who will still undergo the judicial process. The respondents are selected from 18 years old and above, both male and female PDLs including those with different race and ethnicity. The exclusion criteria of this study are those PDLs who are suspected to be aggressive and those who are not able or willing to sign an informed consent.

### **Ethical Considerations**

Preceding the data collection, all participants were made aware of the study's voluntary nature. All participants were asked to sign an informed consent form. The informed consent form includes who are the researchers conducting the study, description, and purpose of the research study. The informed consent allows assurance that the research participants fully understood what they were asked to do. The participants had the right to withdraw their participation at any stage and time of the study. Their decision to continue or not, was respected. Safety precautions were adhered to such as the anonymity of the participants wherein all personal information will be kept confidential. Participants' names were replaced



on the study transcripts by a unique participant number to protect confidentiality. Only the group of researchers conducting the study would be able to view the participants' answers. A link is provided to access the answers and files where only the researchers can access it to ensure confidentiality. On the researchers' side, safety precautions were adhered to by making interpersonal contact only with the jail wardens outside the facility. All information gathered will be used only for the purpose of research.

## Results

**Table 1.1.** *Age Profile*

Age	Frequency	Percentage
18-21 years old	5	5%
22-39 years old	51	51%
40-59 years old	40	40%
60 years old and above	4	4%
<b>Total</b>	100	100%

Table 1.1 shows the age of the respondents of which 51% belongs to ages 22-39 years old, being the highest, followed by ages 40-59 years old with 40% of the respondents, followed by ages 18-21 years old, with 5%. The least number of respondents belongs to those ages 60 years old and above with 4% respondents. This means that the majority of the PDLs come from the ages ranging from 22-39 years old.

According to Philippine Center for Investigative Journalism, an independent nonprofit media agency, from 2002-2012, more than half of the whole population of PDLs are coming from the age ranging from 22-39 years old. However, in 2014, this age group decreased its population to less than 50%.

On the other hand, the age ranging from 40-59 years old comprise up to 43% of the total population in 2014. Combining these two age ranges, this will account for about 87 to 90% of the total population since 2002. Moreover, there is also a significant increase in the number of PDLs from ages 60 years old and above since 2002. Lastly, there is a fluctuating rise and fall in the numbers of PDLs coming from ages 18-21 years old (Sanchez, 2017).

**Table 1.2.** *Sex Profile*

Sex	Frequency	Percentage
Male	51	51%
Female	49	49%
<b><i>Total</i></b>	100	100%

Table 1.2 shows that, of the 100 respondents, 51% were male and 49% were female. This means that majority of the persons deprived of liberty (PDLs) are male.

Statista Research Department (2021), an independent, objective, and insight-driven research service, stated that the number of male PDLs has outnumbered the population of female PDLs within prison or correctional facilities in the Philippine setting with the male population at 89% while female population at 11%. This means that majority of the PDLs within prison or correctional facilities are male PDLs.

**Table 1.3.** *Educational Attainment of Respondents*

Educational Attainment	Frequency	Percentage
Didn't go to school	0	0%
Elementary Level	17	17%
Elementary Graduate	10	10%
High School Level	16	16%
High School Graduate	26	26%
College Level	20	20%
College Graduate	11	11%
<b><i>Total</i></b>	100	100%

Table 1.3 shows that, of the 100 respondents, 26% of the PDLs have graduated from high school, followed by 20% who have attained college education, and 17% who have attained elementary education. Moreover, 16% of the PDLs have attained secondary education, followed by 11% who have graduated from college and 10% who have graduated from elementary. This means that the majority of the PDLs have graduated from high school.

Based on Philippine Center for Investigative Journalism, over half of all PDLs (51%) in the Philippine prison facilities had access to basic education, including a portion who graduated from elementary schools. Furthermore, PDLs who have finished high school education make up one-third of the total population. Lastly, 10% of the total population of all PDLs had access to college education with a small fraction who have successfully graduated with degrees (Sanchez, 2017).

**Table 2.1.** *Health Responsibility of the Respondents*

<i>Health Promoting Behaviors</i>	SD	Wx	Rank	Verbal Description
1.1. I use various health information for my well-being.	0.70	3.58	2 <sup>nd</sup>	<i>Routinely</i>
1.2. I do preventive actions to avoid disease and illness.	0.69	3.49	4 <sup>th</sup>	<i>Routinely</i>
1.3. I engage in health care routines such as bathing and toothbrushing.	0.59	3.79	1 <sup>st</sup>	<i>Routinely</i>
1.4. I adopt a healthy lifestyle such as doing physical activity and diet.	0.64	3.54	3 <sup>rd</sup>	<i>Routinely</i>
1.5. I consult to a doctor whenever I feel sick.	0.92	2.71	5 <sup>th</sup>	<i>Often</i>
<b>Composite Mean</b>	0.71	3.42		<i>Routinely</i>

*Legend:* Never (1.00-1.74); Sometimes (1.75-2.49); Often (2.50-3.24); Routinely (3.25-4.00)

Table 2.1 shows the health promoting behaviors of persons deprived of liberty (PDLs) during COVID-19 pandemic regarding health responsibility. Among the indicators mentioned, the PDLs were “Routinely” engaging in health care routines such as bathing and toothbrushing which ranked first with a weighted mean of 3.79. The PDLs were also “Routinely” using various health information for their well-being, adopting a healthy lifestyle such as doing physical activity and diet and doing preventive actions to avoid disease and illness with weighted means of 3.58, 3.54 and 3.49, respectively. Moreover, the PDLs were “Often” consulting to a doctor whenever they feel sick with a weighted mean of 2.71.

In overall, the PDLs were “Routinely” adhering to health promoting behaviors during COVID-19 pandemic regarding health responsibility with a composite mean of 3.42.

Sanitary facilities that are in good condition, clean, adequate, and easily accessible are critical for ensuring the hygiene and dignity of people in detention, as well as preventing the spread of certain infectious diseases. PDLs are responsible for their own personal hygiene, as well as for caring for and keeping their clothes and accommodations clean. To do so, they

must have the necessary toiletries on hand in sufficient quantity. Personal hygiene is essential to protect community life in a situation of deprivation of liberty and to prevent diseases, particularly skin problems, from occurring, and it is also an essential component of personal dignity. Inability to meet essential needs in terms of personal hygiene may constitute cruel, inhumane, or degrading treatment (Association for the Prevention of Torture, 2019).

As the pandemic spreads, state agencies should be flexible in enforcing restrictions on inmates' ability to communicate with the outside world, specifically regarding health information (Rumold, 2020). One of the preventive actions that prison or correctional facilities can do is to empower PDLs to have access to health information most especially on COVID-19. All staff and people in prisons and other places of detention should be fully aware of COVID-19 prevention strategies, including hand hygiene, respiratory etiquette (covering coughs and sneezes), physical distancing (keeping at least 1 meter away from others), being alert to COVID-19 signs and symptoms, staying away from ill people, and (in the case of staff) staying home when ill (WHO, 2021).

The provision of health care for PDLs is the responsibility of the state. PDLs should be entitled to the same health-care standards as the general public, and they should have free access to necessary health-care services without regard to their legal status. Every prison or correctional facility shall have a health-care service tasked with assessing, promoting, and improving the physical and mental health of PDLs, with special attention paid to PDLs with special health-care needs or health issues impeding their rehabilitation (APT, *n.d.*) Although this is the ideal concept on healthcare regarding PDLs, former hospital chief Ernesto Tamayo previously told the

Senate that 20% of inmates in the maximum security compound die each year within the country, which is significantly higher than one per day. He further added that only four doctors serve 27,821 inmates in Bilibid alone and the facilities are poorly equipped which are all evidence of poor healthcare system within the country (Buan, 2019).

**Table 2.2.** *Physical Activity of the Respondents*

<i>Health Promoting Behaviors</i>	SD	Wx	Rank	Verbal Description
2.1. I engage in jogging and brisk walking every day.	0.89	2.79	4 <sup>th</sup>	<i>Often</i>
2.2. I play various sports such as basketball, badminton, other sports.	0.97	2.61	5 <sup>th</sup>	<i>Often</i>
2.3. I help in daily chores such as washing dishes and cleaning around the area.	0.75	3.46	2 <sup>nd</sup>	<i>Routinely</i>
2.4. I watch TV and read books.	0.66	3.57	1 <sup>st</sup>	<i>Routinely</i>
2.5. I join some of the livelihood programs offered within the facility.	0.78	3.40	3 <sup>rd</sup>	<i>Routinely</i>
<b>Composite Mean</b>	0.81	3.17		<i>Often</i>

*Legend:* Never (1.00-1.74); Sometimes (1.75-2.49); Often (2.50-3.24); Routinely (3.25-4.00)

Table 2.2 shows the health promoting behaviors of persons deprived of liberty (PDLs) during COVID-19 pandemic regarding physical activity. Among the indicators mentioned, the PDLs were “Routinely” watching TV and reading books as part of their physical activity which ranked first with a weighted mean of 3.57. The PDLs were also “Routinely” helping in daily chores such as washing dishes and cleaning around the area and joining some of the livelihood programs offered within the facility with weighted means of 3.46 and 3.40, respectively. Moreover, the PDLs were “Often” engaging in jogging and brisk walking every day and playing various sports such as basketball, badminton and other sports with weighted means of 2.79 and 2.61, respectively.

In overall, the respondents were “Often” adhering to health promoting behaviors during COVID-19 pandemic regarding physical activity with a composite mean of 3.17.

PDLs lose their liberty, but information access is a human right, and televisions can also be used as an incentive for cooperation and good behavior in a prison setting. Furthermore, TVs make prisons a safer place for both officers and PDLs by reducing levels of violence and decreasing the sense of isolation that can lead to PDLs harming themselves or others (Queensland Corrective Services, 2019). While each prison is unique, one thing they all have in common is access to books. Almost every prison, whether state or federal, has a library where PDLs can check out various types of reading material. Access to a wide range of books allows PDLs to learn, explore their interests, and reconnect with the humanity that the prison system has often stripped away from them. It allows them to share stories and reflect on their own lives. It provides an opportunity to learn and experiment with new ideas. It provides an opportunity to prepare for life after prison, beyond prison (NCAC, 2020).

Each inmate housing unit has a large number of inmate orderlies who perform general janitorial duties such as sweeping and mopping floors, cleaning showers, washing dishes, collecting trash and recycling, and other similar tasks (Zoukis, 2017).

The goal of livelihood programs is to teach PDLs how to enhance their livelihood skills, provide services, and improve their moral and spiritual well-being. This can be accomplished by providing them with livelihood seminars and trainings. skills. Furthermore, through the livelihood programs, PDLs can gain skills to become more productive, as well as

relieve boredom and avoid acquiring vices inside prison (Estillore & Aoas, 2020).

Sports and physical activity were once thought to be simply a way to keep PDLs busy, but there is a growing body of evidence demonstrating a variety of benefits. These include improved physical and mental health outcomes, assisting PDLs in adjusting to and coping with life in prison, reducing violence and conflict, and, perhaps most importantly, assisting PDLs in reintegrating back into the community (Gallant, 2020).

**Table 2.3.** *Nutrition of the Respondents*

<i>Health Promoting Behaviors</i>	SD	Wx	Rank	Verbal Description
3.1. I eat meals at least 3 times a day.	0.54	3.78	1 <sup>st</sup>	<i>Routinely</i>
3.2. I eat servings of meat and poultry in my meals.	0.79	2.75	4 <sup>th</sup>	<i>Often</i>
3.3. I eat fruits and vegetables daily.	0.78	2.58	5 <sup>th</sup>	<i>Often</i>
3.4. I take in vitamins and supplements daily.	1.11	2.90	3 <sup>rd</sup>	<i>Often</i>
3.5. I drink about 6-8 glasses of water a day.	0.68	3.61	2 <sup>nd</sup>	<i>Routinely</i>
<b>Composite Mean</b>	0.78	3.12		<i>Often</i>

*Legend: Never (1.00-1.74); Sometimes (1.75-2.49); Often (2.50-3.24); Routinely (3.25-4.00)*

Table 2.3 shows the health promoting behaviors of persons deprived of liberty (PDLs) during COVID-19 pandemic regarding nutrition. Among the indicators mentioned, the PDLs were “Routinely” eating meals at least 3 times a day which ranked first with the weighted mean of 3.78. The PDLs were also “Routinely” drinking about 6-8 glasses of water in a day with the weighted mean of 3.61. Moreover, the PDLs were “Often” taking vitamins and supplements daily, eating servings of meat and poultry in meals, and eating fruits and vegetables daily with weighted means of 2.90, 2.75 and



2.58, respectively.

In overall, the PDLs were “Often” adhering to health promoting behaviors during COVID-19 pandemic regarding nutrition with a composite mean of 3.12.

Inmates' food needs must be met by the authorities. Failure to comply with this provision may be considered torture or another form of cruel, inhuman, or degrading treatment. A crucial safeguard for PDLs is the inclusion of quantity and quality standards for food served in jails and prisons, including minimum nutritional value requirements. These minimal needs ought to be implementable within the inmate meal budget. In general, mealtime patterns are adjusted to staff work schedules and security considerations, especially for meals provided in cells (Association for Prevention of Torture, 2019).

Detainees should always have access to an adequate amount of fresh water. The accessible water supply should be sufficient for meal preparation, personal hygiene, cleaning, watering, and any other necessities in addition to providing the drinking water needs of both PDLs and staff. Due to its periodic scarcity, water needs to be handled and dispersed with fairness and rationale. Overcrowding in prisons can have a harmful impact on the water supply (Association for Prevention of Torture, 2019).

According to the Bureau of Corrections (BuCor), strategic measures to prevent the pandemic have been put in place, including vaccination (95.95% of all persons in confinement nationwide have been vaccinated against COVID-19). As a result, COVID-19 has not been present in BuCor's correctional institutions for a few months. The BuCor provided basic necessities, hygiene kits, and extra nourishment, vitamins and supplements in the form of milk, rice, and canned products. Additionally, the BuCor

provided isolation facilities with on-call medical staff all the time (CHR, 2022).

A review of the Maryland Department of Public Safety's 5-week meal cycle, which displays the food served in its state-wide correctional facilities, reveals that inmates, who are not given the option of what they can eat, are served 25 million meals a year of the same diet, which includes 52 ounces of meat, poultry, and eggs on average. This analysis demonstrates that meals contain far too much protein, fat, and sodium while being low in important nutrients like fiber, vitamin K (from fresh greens), and several other vitamins. The study also reveals that inmates are consuming 48% more protein and 101% more carbohydrates than the recommended daily amount while consuming 50% less fiber and 30% less water than is suggested for a baseline healthy diet (Roadmap to Holistic Health, 2022).

**Table 2.4.** *Interpersonal Relations of the Respondents*

<i>Health Promoting Behaviors</i>	SD	W <sub>x</sub>	Rank	Verbal Description
4.1. I talk to others if I am worried or sad.	0.87	3.13	3 <sup>rd</sup>	Often
4.2. I have good relationships with other PDLs.	0.55	3.60	2 <sup>nd</sup>	Routinely
4.3. I solve my problems by talking to others.	0.84	3.10	4 <sup>th</sup>	Often
4.4. I have good relationships towards the staff of the facility.	0.57	3.69	1 <sup>st</sup>	Routinely
4.5. I talk to a physician about my health issues or concerns.	1.00	2.63	5 <sup>th</sup>	Often
<b>Composite Mean</b>	0.77	3.23		Often

*Legend:* Never (1.00-1.74); Sometimes (1.75-2.49); Often (2.50-3.24); Routinely (3.25-4.00)

Table 2.4 shows the health promoting behaviors of persons deprived of liberty (PDLs) during COVID-19 pandemic regarding interpersonal relations. Among the indicators mentioned, the PDLs were “Routinely”

having a relationship to the staff of the facility which ranked first with a weighted mean of 3.69. The PDLs were also “Routinely” having good relationships with other PDLs with a weighted mean of 3.60. Moreover, the PDLs were “Often” talking to others if worried or sad, solving problems by talking to others and talking to a physician about health issues with weighted means of 3.13, 3.10, 2.63 respectively.

In overall, the PDLs were “Often” adhering to health promoting behaviors during COVID-19 pandemic regarding interpersonal relations with a composite mean of 3.23.

PDLs and staff get along well and are respectful of one another. PDLs are assigned to a specific staff member who provides them with emotional and practical support and encourages them to make life-changing decisions. By attending to an inmate's basic needs as well as defining and communicating expectations for behavior, relationships with staff and PDLs that have a healthy mix of control and respect improve practically all elements of the experience among PDLs. Staff members treat PDLs with dignity during their time in custody and urge them to accept accountability for their own actions and choices. In order to establish respectable settings, staff must be able to utilize their authority professionally with both confidence and caution. Prison officials –interacting with PDLs, oversee the facility's security and safety and are also in charge of meeting organizational expectations (Aliyeva, 2022).

Peer social support has been related to both greater likelihood of desistance and improved wellbeing in prison, making it a potentially useful coping mechanism. Many early studies concluded that close interpersonal relationships have positive effects for both male and female PDLs for

having good relationship with other PDLs. Social support has been found to produce positive outcomes. Additionally, the relationship between cellmates may affect their use of specific coping mechanisms, with those who have positive relationships possibly being more likely to provide and receive emotional support (Mowen & Boman, 2019).

Due to the fact that prisons are closed environments, the health service needs to be incorporated into the national health system so that national health policies, programs, and protocols are administered equitably in jails. In addition to substance abuse and mental health issues, people who are incarcerated are disproportionately likely to suffer chronic health issues like diabetes, high blood pressure, and HIV. However, medical treatment provided in prisons is inadequate and challenging to obtain. Every jail shall provide health care services that are provided to all inmates without charge or restriction and that are at least equal to those that are offered in the community. For the size of the jail population, the facilities, machinery, and medical supplies are insufficient and on top of that, shortage of doctors make it more difficult to deliver essential health services (Association for the Prevention of Torture, 2019).

**Table 2.5.** *Spiritual Growth of the Respondents*

<i>Health Promoting Behaviors</i>	SD	Wx	Rank	Verbal Description
5.1 I value my relationship with God.	0.53	3.81	1 <sup>st</sup>	<i>Routinely</i>
5.2 I believe that my life has a purpose.	0.62	3.73	2 <sup>nd</sup>	<i>Routinely</i>
5.3 I read the bible and pray.	0.82	3.49	4 <sup>th</sup>	<i>Routinely</i>
5.4 I attend to bible studies and online masses.	1.06	3.08	5 <sup>th</sup>	<i>Often</i>
5.5 I want to make right actions in the future.	0.75	3.58	3 <sup>rd</sup>	<i>Routinely</i>
<b>Composite Mean</b>	0.76	3.54		<i>Routinely</i>

*Legend:* Never (1.00-1.74); Sometimes (1.75-2.49); Often (2.50-3.24); Routinely (3.25-4.00)

*Table 2.5* shows the health promoting behaviors of persons deprived of liberty (PDLs) during the COVID-19 pandemic regarding spiritual growth. As indicated above, the PDLs were “Routinely” valuing their relationship with God which ranked first with a weighted mean of 3.81. The PDLs were also “Routinely” believing that their lives have a purpose with a weighted mean of 3.73. Furthermore, the PDLs were also “Routinely” wanting to make the right actions in the future, reading the bible and praying with weighted means of 3.58 and 3.49, respectively. In addition, the PDLs were “Often” attending to bible studies and online masses with a weighted mean of 3.08. In overall, the PDLs were “Routinely” adhering to health promoting behaviors during the COVID-19 pandemic regarding spiritual growth with a composite mean of 3.54.

Individuals who are deprived of liberty (PDLs) might find the strength to withstand their incarceration and cultivate hopes and aspirations for the future by cultivating a relationship with God and practicing their religious faith in these trying times (Alm, 2018). A person's religious beliefs strengthen themselves during adversity. For people to live in a flawed and sinful world, people are bound to encounter challenges. However, faith is what enables people to remain resilient during difficult circumstances (Faith Island, 2017).

Regarding responsiveness, faith-based or spiritually-led services are intrinsically responsive to returning PDLs with a newly discovered or reaffirmed faith who require support with a hope to make right actions in the future. Criminologists consider cognitive behavioral therapy (CBT) as a treatment that addresses the broad aspect of receptivity. According to the clinical psychology literature, a meta-analysis of 22 rigorous studies of spiritual or religious adaptations to existing psychotherapies (many of

which were based on CBT) revealed stronger effects on well-being and mental health compared to the same therapies without spiritual/religious adaptations. It is time to maximize the strengths of the faith-based communities by proactively engaging government and community stakeholders. When appropriately attuned to mitigating criminogenic threats, hazards and responsive to needs, these collaborations may serve as efficient and humanizing rehabilitation catalysts (Roman & Roman, 2019).

Faith-based activities have a vital role in society; hence, it is crucial that faith-based interventions are an essential part of the prison system. This permits jailed individuals to maintain an active religious lifestyle. In fact, the participation of imams, pastors, rabbis, and other religious leaders in jail can give convicts additional counseling, support, and advice. Given the severe conditions of jail, it is perhaps not surprising that religious conversions and activities such as bible reading, praying, worshipping are common and well-documented within prisons (Robinson-Edwards & Kewley, 2018).

**Table 2.6. Stress Management of the Respondents**

<i>Health Promoting Behaviors</i>	<i>SD</i>	<i>Wx</i>	<i>Rank</i>	<i>Verbal Description</i>
6.1. I call my family or friends when I am stressed.	0.97	2.93	4 <sup>th</sup>	Often
6.2. I listen to music or watch TV when stressed.	0.69	3.53	1 <sup>st</sup>	Routinely
6.3. I play sports such as basketball and volleyball to relieve stress.	0.92	3.10	2 <sup>nd</sup>	Often
6.4. I eat food when I am stressed.	1.01	2.39	5 <sup>th</sup>	Sometimes
6.5. I dance and sing when stressed.	0.87	3.09	3 <sup>rd</sup>	Often
<b><i>Composite Mean</i></b>	<b><i>0.89</i></b>	<b><i>3.01</i></b>		<b><i>Often</i></b>

*Legend: Never (1.00-1.74); Sometimes (1.75-2.49); Often (2.50-3.24); Routinely (3.25-4.00)*

*Table 2.6* shows the health-promoting behaviors of persons deprived of liberty (PDLs) during the COVID-19 pandemic regarding stress management. Among the indicators mentioned, the PDLs were “Routinely” listening to music or watching TV when stressed which ranked first with a weighted mean of 3.53. The PDLs were “Often” playing sports such as basketball and volleyball when stressed with a weighted mean of 3.10. They were also “Often” dancing and singing and seeking help from family and friends by calling them as part of their coping mechanisms when they are stressed with weighted means of 3.09 and 2.93, respectively. Moreover, the PDLs were “Sometimes” eating food when stressed which ranked fifth with a weighted mean of 2.39.

In overall, the PDLs were “Often” adhering to health-promoting behaviors of persons deprived of liberty (PDLs) during the COVID-19 pandemic regarding stress management with a composite mean of 3.01.

PDLs who experience loneliness report stress and depression. Without enjoyable amusement, some people feel that time passes slowly. PDLs will have the opportunity to watch a television program while being watched, usually live sports programming. It is difficult for PDLs to have a TV in their cells due to security issues. However, good-character offenders are given the luxury of having a TV in their cell. Watching TV helps inmates to relieve the pressure of being in prison. They can learn something about the outside world and perform their social duty as citizens by watching TV (HCSD, 2021).

Research regularly shows that sport can offer a more acceptable way to involve PDLs in health and well-being promotion than a public health approach, supporting the tremendous potential for sport to favorably benefit

PDLs' mental health. Increased physical activity in the prison gym has been shown to have numerous advantages, many of which are similar to those noted in the general population. These advantages include improvements in overall physical fitness, improved confidence, and self-esteem, and decreased symptoms of stress, depression, and anxiety (Ulster University, 2020).

The cultural program seeks to foster PDL camaraderie, support the growth of self-confidence, and encourage the sharing of cultural talents as a source of uplifting entertainment. Dance, singing, acting, and art classes are among the cultural activities that are permitted in prison or correctional facilities (BJMP, 2010).

Prison visiting is an important tool for improving PDLs' social networks and encouraging good prison behavior (Turanovic & Tasca, 2017). People who are incarcerated are cut off from their families and communities and have very limited and regulated access to the outside world. During the COVID-19 pandemic, visits to prisons are temporarily suspended in many countries worldwide (Hewson *et al.*, 2020) and the loss of such visits could lessen the use of social support for mitigating against and coping with mental distress and the risk of suicide and self-harm among prisoners (De Claire & Dixon, 2017). Despite these obstacles, those who keep in touch with their family while they are in prison often cope more adaptably after being released. According to the findings of structural equation modeling, having more frequent family contact while incarcerated predicts increases in family connectivity, which in turn predicts better mental health (Folk *et. al.*, 2019).

While many people develop healthy coping mechanisms, some learn unhealthy ones, such as utilizing food as an avoidance technique. When



someone is stressed, emotional eating may be adopted to comfort themselves. This behavior can be recognized by a rise in calorie-dense, sweet, or fatty food consumption (Department of Psychology, 2016). PDLs are most likely not doing stress eating as a coping mechanism because according to Badila *et al.*, PDLs within prisons or correctional facilities describe experiences of food insecurity. PDLs complained about a bland diet, as well as about how unhygienically the food was produced and of poor quality and quantity. Most PDLs relied upon outside resources and support from friends and family for food provision, whereas individuals without such support suffered from extreme food insecurity and hunger (Badila *et al.*, 2021).

**Table 3.1.** *Test of Significant Relationship between Age and the Aspects of Health Promoting Behaviors*

Variables		Statistics	p	Remarks	Decision
Independent	Dependent	Value	value		
Age	Health Responsibility	$r = -.07$	.51	Negligible Correlation	<i>Failed to Reject Ho</i>
	Physical Activity	$r = -.14$	.17	Negligible Correlation	<i>Failed to Reject Ho</i>
	Nutrition	$r = -.13$	.22	Negligible Correlation	<i>Failed to Reject Ho</i>
	Interpersonal Relations	$r = -.19$	.05	Slight Correlation	<i>Failed to Reject Ho</i>
	Spiritual Growth	$r = .14$	.18	Negligible Correlation	<i>Failed to Reject Ho</i>
	Stress Management	$r = -.11$	.30	Negligible Correlation	<i>Failed to Reject Ho</i>
<i>N</i>		100			
<i>Significant Level</i>		0.05 $\alpha$			

Table 3.1 shows the test of significant relationship between the age and the 6 aspects of health promoting behaviors of PDLs. Age, as an independent variable, is not significant to 0.05 alpha on most of the health promoting behaviors of PDLs. Health Responsibility  $r(100) = -.07$ ,  $p = .5$ , Physical

Activity  $r(100)=-.14$ ,  $p=.17$ , Nutrition  $r(100)= -.13$ ,  $p=.22$ , Spiritual Growth  $r(100)=.14$ ,  $p=.18$ , and Stress Management  $r(100)=-.11$ ,  $p=.30$ ) are not significantly affected by age to 0.05 alpha. This means that age is not an influential factor that affect the health promoting behaviors of PDLs during COVID-19 pandemic in terms of their health responsibility, physical activity, nutrition, spiritual growth and stress management. However, interpersonal relations is positively correlated and significant at  $r(100)=-.19$ ,  $p=..05$ ) to .05 alpha. This proves that the increase or decrease in age of the respondents have influenced their health promoting behaviors as to how they interact with other PDLs and as well as to the staff of the facility. Furthermore, the age of the respondents is a factor that can influence the ability of PDLs to create interpersonal relations with fellow inmates and the staff of the facility.

There is strong evidence showing that homophily plays a significant role in fostering tie formation within prison or correctional facilities. One of the demographic factors that drive this phenomenon on homophily is the age of the PDLs. This means that PDLs who are likely of the same age category will have a better interpersonal relation compared to others from other age categories. This type of network is explained by the assumption that similarity on important attributes, such as age, facilitates communication, improves understanding, and increases predictability and trustworthiness (Sentse *et al.*, 2018).

**Table 3.2.** *Test of Significant Relationship between Sex and the Aspects of Health Promoting Behaviors*

Variables		Statistics Value	p value	Remarks	Decision
Independent	Dependent				
Sex	Health Responsibility	$\chi^2=3.87$ , c.v.= 5.99 d.f.=2	.14	Negligible Correlation	<i>Failed to Reject Ho</i>
	Physical Activity	$\chi^2=.66$ , c.v.= 5.99 d.f.=2	.72	Negligible Correlation	<i>Failed to Reject Ho</i>
	Nutrition	$\chi^2=7.09$ , c.v.= 5.99 d.f.=2	.03	Dependent	<i>Reject Ho</i>
	Interpersonal Relations	$\chi^2=2.98$ , c.v.= 5.99 d.f.=2	.22	Negligible Correlation	<i>Failed to Reject Ho</i>
	Spiritual Growth	$\chi^2=8.53$ , c.v.= 5.99 d.f.=2	.01	Dependent	<i>Reject Ho</i>
	Stress Management	$\chi^2=3.74$ , c.v.= 5.99 d.f.=2	.30	Negligible Correlation	<i>Failed to Reject Ho</i>
N				100	
Significant Level				0.05 $\alpha$	

Table 3.2 shows the test of significant relationship between the sex and the 6 aspects of health promoting behaviors of PDLs. Sex, as an independent variable, is not significant to 0.05 alpha on most of the health promoting behaviors of PDLs. Health Responsibility  $r(100)= \chi^2=3.87$ , c.v.= 5.99 d.f.=2,  $p=.14$ ; Physical Activity  $r(100)= \chi^2=.66$ , c.v.= 5.99 d.f.=2,  $p=.72$ ; Interpersonal Relations  $r(100)= \chi^2=2.98$ , c.v.= 5.99 d.f.=2,  $p=.22$ , and Stress Management  $r(100)= \chi^2=3.74$ , c.v.= 5.99 d.f.=2,  $p=.30$  are not significantly affected by sex to 0.05 alpha. This means that sex is not an influential factor that affects the health promoting behaviors of PDLs during COVID-19 pandemic. However, Nutrition and Spiritual Growth are correlated and dependent at  $r(100)= \chi^2=7.09$ , c.v.= 5.99 d.f.=2,  $p=.03$  and  $r(100)= \chi^2=8.53$ , c.v.= 5.99 d.f.=2,  $p=.01$ , respectively to .05 alpha. This demonstrates that sex has an impact on PDLs' nutrition and spiritual growth. Additionally, the respondents' sex is a variable that has an effect on the PDLs' dietary needs as well as their exhibited spiritual growth.

PDLs are more likely to have health issues and malnutrition, according to

literature from various sources all over the world. Both male and female PDLs are at risk of malnutrition during their admission within the correctional facility. It can be deduced that for female PDLs, low consumption of vegetables, high levels of physical activity, and the presence of depression and anxiety all increased the risk of undernourishment. It is evident that lesser snacking between meals and food insecurity enhanced the likelihood of undernutrition for male PDLs (Marieke, 2017).

The number of female PDLs is dramatically growing, and they are presenting with improved emotional stability while in prison or correctional facilities. It has been determined that the instillation of hope is a therapeutic factor and motivating energy that supports goal-setting, the lowering of unpleasant emotions, and coping skills. This has been fostered by the well-founded Christian spirituality among female PDLs (Nedderman *et al.*, 2010)

**Table 3.3.** *Test of Significant Relationship between Educational Attainment and the Aspects of Health Promoting Behaviors*

Variables		Statistics	p	Remarks	Decision
Independent	Dependent	Value	value		
Educational Attainment	Health Responsibility	$\chi^2=15.40$ , c.v.=18.31 d.f.=10	.12	Negligible Correlation	<i>Failed to Reject Ho</i>
	Physical Activity	$\chi^2=5.15$ , c.v.= 18.31 d.f.=10	.88	Negligible Correlation	<i>Failed to Reject Ho</i>
	Nutrition	$\chi^2=9.34$ , c.v.= 18.31 d.f.=10	.50	Negligible Correlation	<i>Failed to Reject Ho</i>
	Interpersonal Relations	$\chi^2=10.63$ , c.v.= 18.31 d.f.=10	.39	Negligible Correlation	<i>Failed to Reject Ho</i>
	Spiritual Growth	$\chi^2=4.75$ , c.v.= 18.31 d.f.=10	.91	Negligible Correlation	<i>Failed to Reject Ho</i>
	Stress Management	$\chi^2=9.99$ , c.v.= 18.31 d.f.=10	.44	Negligible Correlation	<i>Failed to Reject Ho</i>
N			100		
Significant Level			0.05 $\alpha$		

*Table 3.3* shows the test of significant relationship between the educational attainment and the 6 aspects of health promoting behaviors of PDLs. Educational attainment, as an independent variable, is not significant to 6 identified variables of health promoting behaviors among PDLs. Health Responsibility  $r(100) = \chi^2 = 15.40$ ,  $c.v. = 18.31$ ,  $d.f. = 10$ ,  $p = .12$ ; Physical Activity  $r(100) = \chi^2 = 5.15$ ,  $c.v. = 18.31$ ,  $d.f. = 10$ ,  $p = .88$ ; Nutrition  $r(100) = \chi^2 = 9.34$ ,  $c.v. = 18.31$ ,  $d.f. = 10$ ,  $p = .50$ ; Interpersonal Relations  $r(100) = \chi^2 = 10.63$ ,  $c.v. = 18.31$ ,  $d.f. = 10$ ,  $p = .39$ ; Spiritual Growth  $r(100) = \chi^2 = 4.75$ ,  $c.v. = 18.31$ ,  $d.f. = 10$ ,  $p = .91$  and Stress Management  $r(100) = \chi^2 = 9.99$ ,  $c.v. = 18.31$ ,  $d.f. = 10$ ,  $p = .44$  are not significantly affected by educational attainment to 0.05 alpha. This means that all 6 health promoting behaviors are not influenced or affected by the educational attainment of PDLs.

## Conclusions and Recommendations

*Based on the results of this study, the following findings are drawn:*

The age of the respondents with the highest frequency belongs to the age ranging from 22 to 39 years old (51%). Out of the 100 respondents, majority were male (51%). Moreover, most of the respondents were able to graduate from high school (26%).

Health promoting behaviors of PDLs during COVID-19 pandemic were classified into Health Responsibility – 3.42 (Routinely); Physical Activity – 3.17 (Often); Nutrition – 3.12 (Often); Interpersonal Relations – 3.23 (Often); Spiritual Growth – 3.54 (Routinely); and Stress Management – 3.01 (Often).

Of the six identified areas on the health promoting behaviors of PDLs

during COVID-19 pandemic, spiritual growth ranked first with a composite mean of 3.54. The respondents were “Routinely” adhering to spiritual growth as part of their health promoting behaviors during COVID-19 pandemic. This was followed by health responsibility with a composite mean of 3.42. The respondents were “Routinely” adhering to health responsibility as part of their health promoting behaviors during COVID-19 pandemic. Moreover, the respondents were “Often” adhering to interpersonal relations, physical activity, nutrition and stress management as part of their health promoting behaviors during COVID-19 pandemic with composite means of 3.23, 3.17, 3.12 and 3.01, respectively.

Having the highest weighted mean under each category were the following: under Health Responsibility was *“I engage in health care routines such as bathing and toothbrushing”* (wx=3.79); under Physical Activity was *“I watch TV and read books”* (wx=3.57); under Nutrition was *“I eat meals at least 3 times a day”* (wx=3.78); under Interpersonal Relations was *“I have good relationships towards the staff of the facility”* (wx=3.69); under Spiritual Growth was *“I value my relationship with God”* (wx=3.81) and under Stress Management was *“I listen to music or watch TV when stressed”* (wx=3.53).

The age of the respondents may affect their ability to create interpersonal relations with fellow inmates and the staff within the facility. Furthermore, the sex of the respondents can also affect their health promoting behaviors concerning their nutrition and spiritual growth.

*Based on the findings of this study, the following conclusions are drawn:*

Most of the PDLs are falling under the age of 22 to 39 years old, male, and were able to graduate from high school.

The six identified areas on health promoting behaviors of PDLs during COVID-19 pandemic from highest to lowest composite means are arranged accordingly: Spiritual Growth – 3.54 (Routinely); Health Responsibility – 3.42 (Routinely); Interpersonal Relations– 3.23 (Often); Physical Activity – 3.17 (Often); Nutrition – 3.12 (Often) and Stress Management – 3.01 (Often).

With regard to the significant relationship between the demographic profile and the health-promoting behaviors of persons deprived of liberty (PDLs) during COVID 19 pandemic: age, sex and educational attainment do not have a significant relationship to the health behavioral action of the respondents specifically on health responsibility. Moreover, age and educational attainment do not significantly affect the activity-related affect of the respondents specifically on the nutrition and physical activity. Lastly, educational attainment does not have a significant relationship to the interpersonal/situational influences of the respondents specifically on the stress management.

However, age can affect the respondents' interpersonal relations as part of their health promoting behavior. Moreover, sex can also affect the health promoting behaviors of PDLs concerning their nutrition and spiritual growth during COVID-19 pandemic. As a conclusion, independent variables specifically on the age and sex have a significant relationship on the health promoting behaviors of persons deprived of liberty (PDLs) in terms of their interpersonal relations, nutrition, and spiritual growth during the COVID 19 pandemic.

*Based on the findings and conclusions of this study, the following are suggested to the Bureau of Jail Management and Penology Dumaguete that*

*these recommendations be part of the BJMP Improvement Plan which are enumerated as follows:*

1. To the Bureau of Jail Management and Penology Dumaguete – We recommend that they continuously cater to the needs of the PDLs by ensuring that their voices are heard within the healthcare community. We also recommend that they collaborate effectively with other agencies and departments in promoting health among PDLs and in working with the findings of this study.
2. To the Department of Interior and Local Government – We recommend that they make necessary interventions on the findings of this research study specifically on the shortage of healthcare professionals, inadequate supply of fruits and vegetables and concerns on sports and recreational activities within the Bureau of Jail Management and Penology Dumaguete.
3. To the Healthcare Community – We recommend that they may do more medical missions in the Bureau of Jail Management and Penology Dumaguete to show among the PDLs that they are important and of great significance within the healthcare community.
4. To the Nursing Community and Nurses – We recommend that they consider doing more volunteer work inside the Bureau of Jail Management and Penology Dumaguete for the PDLs to communicate and channel their health concerns and for the PDLs to receive various nursing care modalities.
5. To the Social Workers – We recommend that they may extend their help especially on the social concerns that PDLs have in Bureau of Jail Management and Penology Dumaguete.
6. To the Religious Organizations – We recommend that different religious organizations do more religious activities within the facility such as bible



studies, gospel reading and reflection, worship activities and other appropriate interfaith activities.

7. To the Student Nurses (Outreach Programs) – We recommend that they may use the findings of this research study as a basis or reference when catering to the needs of the PDLs in Bureau of Jail Management and Penology Dumaguete.
8. To the Future Researchers – We recommend that they may work more on the gaps and limitations of this research study with the aspiration that the Bureau of Jail Management and Penology Dumaguete will have better sources when catering to the needs of the PDLs with regards to their health.

## References:

- Ahalt, C., Haney, C., Kinner, S., & Williams, B. (2018). Balancing the Rights to Protection and Participation: A Call for Expanded Access to Ethically Conducted Correctional Health Research. *J Gen Intern Med*.
- Aliyeva, G. (2022). Attitudes Toward Elderly Inmates in Correctional Facilities. *Prizren Social Science Journal*. Retrieved from [https://econpapers.repec.org/article/prjpublsh/v6\\_3ay\\_3a2022\\_3ai\\_3a1\\_3ap\\_3a30-39.htm](https://econpapers.repec.org/article/prjpublsh/v6_3ay_3a2022_3ai_3a1_3ap_3a30-39.htm)
- Allen, E. (2020). Prison TV Uses & Top TV Enclosure Protection Solutions.
- Alm, L. (2018). Your Own Personal Jesus? Doctrinal Beliefs Versus Personal Spirituality Among Inmates Involved in the Monastery Route in Swedish Prisons.
- American Academy of Family Physicians. (2017). Incarceration and Health: A Family Medicine Perspective (Position Paper).
- APT. (2019). Outdoor Exercise. *Oyster Design*. Retrieved from <https://www.apr.ch/en/knowledge-hub/detention-focus-database/life-prison-regime-and-activities/outdoor-exercise>
- Ashgar, R. (2021). Health-promoting behaviour during the COVID-19 pandemic

- among Saudi Adults: A cross-sectional study. *Wiley Online Library*. Retrieved from <https://doi.org/10.1111/jan.14863>
- Association for the Prevention of Torture. (2019). Food and Water. Retrieved from /knowledge-hub/detention-focus-database/material-conditions-detention/food-and-water
- Association for the Prevention of Torture. (2019). Health Care Services. *Association for the Prevention of Torture*. Retrieved from [www.ap.t.ch/en/knowledge-hub/detention-focus-database/health-care/health-care-services](http://www.ap.t.ch/en/knowledge-hub/detention-focus-database/health-care/health-care-services)
- Association for the Prevention of Torture. (2019). Outdoor Exercise. *Oyster Design*. Retrieved from <https://www.ap.t.ch/en/knowledge-hub/detention-focus-database/life-prison-regime-and-activities/outdoor-exercise>
- Association for the Prevention of Torture. (2019). Sanitary Facilities and Personal Hygiene. *Association for the Prevention of Torture*.
- Austin, M. (2018). The Effects of a Music Therapy-Based Stress Management Program on Perceived Stress of Inmates with Mental Illness. *Florida State University ProQuest Dissertations Publishing*.
- Backes, S. (2020). *Decarcerating Correctional Facilities during COVID-19: Advancing Health, Equity, and Safety*. Washington: National Academies Press (US).
- Badila, D., Mapumulo, S., Horwood, C., John, V., & Mapatano, M. (2021). A Qualitative Exploration of Prisoners' Strategies for Coping with Food Insecurity in Prisons in Kinshasa, DRC. Retrieved from <https://www.researchsquare.com/article/rs-1066666/v1>
- Barolo, M., & Vicente, J. (2019). Challenges and Coping Mechanisms of Persons Deprived of Liberty of Sablayan Prison and Penal Farm in the Philippines. *International Journal of Advanced Research in Management and Social Sciences*.
- Baybutt, M., Acin, E., Hayton, P., & Dooris, M. (2014). Promoting health in prisons: a settings approach .
- BJMP. (2010). Cultural and Sports Program. Retrieved from <https://www.bjmp.gov.ph/index.php/about-us/programs>
- Buan, L. (2019). 1 prisoner dies in Bilibid every day, says new chief doctor. *Rappler*.
- Cheung, G. (2019). Prisoners: The Right to Medical Treatment – International Law Provisions | Report. *Lawyers' Rights Watch Canada*.

- Chiu, C.-J., Hu, J.-C., Lo, Y.-H., & Chang, E.-Y. (2020). Health Promotion and Disease Prevention Interventions for the Elderly: A Scoping Review from 2015–2019. *Int J Environ Res Public Health*. doi:10.3390/ijerph17155335
- Choudhry, K., Armstrong, D., & Dregan, A. (2017). Nurses' Perceptions of Weight Gain and Obesity in the Prison Environment. *Mary Ann Liebert, Inc.*
- Clear, T., Hardyman, P., Stout, B., Lucken, K., & Dammer, H. (2000). The Value of Religion in Prison: An Inmate Perspective . *Journal of Contemporary Criminal Justice*.
- Commission on Human Rights. (2022). Inputs of the Commission on Human Rights of the Philippines.
- Convocar, J., Billones, V., & Supiter, N. (2020). Perceived Stress, Geopathic Stress and Spirituality of Male Prison Inmates. *Journal of Mental Health and Clinical Psychology*
- Crewe, B., Liebling, A., & Hulley, S. (2015). Staff-Prisoner Relationships, Staff Professionalism, and the Use of Authority in Public- and Private-Sector Prisons. *Cambridge University*.
- De Claire, K., & Dixon, L. (2017). The Effects of Prison Visits From Family Members on Prisoners' Well-Being, Prison Rule Breaking, and Recidivism: A Review of Research Since 1991. *National Library of Medicine*.
- Den Brouke, S. (2020). Why health promotion matters to the COVID-19 pandemic, and vice versa. *Health Promot Int*.
- Donohoe, A. (2016). The Stress- Eating Relationship: How food can be used as a coping mechanism for stress and emotions. *Department of Psychology Dublin Business School*
- Drakeford, L. (2018). Mental Health and the Role of Religious Context among Inmates in State and Federal Prisons: Results from a Multilevel Analysis. *Sage Journals*. Retrieved from <https://doi.org/10.1177/2156869318763248>
- Duarte, C., Cameron, D., McCoy, S. (2022). COVID-19 outbreak in a state prison: a case study on the implementation of key public health recommendations for containment and prevention. *BMC Public Health*.
- Estillore, D., & Aoas, D. (2020). Effects of BJMP Livelihood Program to the Lives of Released Inmates. *International Journal of Innovative Science and Research Technology*.
- Faith Island. (2017, March 23). *Faith Works Centre*. Retrieved from Faithisland.org: <https://faithisland.org/faith/7-reasons-faith-is-important/>
- Faith, R. (2022). Activities in Prison. *Legal Beagle*.

- Folk, J., Stuewig, J., Mashek, D., Tangney, J., & Grossman, J. (2019). Behind bars but connected to family: Evidence for the benefits of family contact during incarceration. *Journal of Family Psychology*.
- Gallant, D. (2020). Giving Prisoners a Sporting Chance. *University of Melbourne and Glen Turner, parkrun Asia Pacific*.
- Gonzalo, A. (2021). Nola Pender: Health Promotion Model. *Nurses Labs*.
- GovPH. (2020). Disinfecting City Jail to Prevent COVID Case.
- HCSD. (2021). Can You Watch TV in Prison
- Hewson, T., Shepherd, A., Hard, J., & Shaw, J. (2020). Effects of the COVID-19 pandemic on the mental health of prisoners. *Elsevier Public Health Emergency Collection*.
- Jang, S., Johnson, B., Hays, J., Hallett, M., & Duwe, G. (2018). Existential and Virtuous Effects of Religiosity on Mental Health and Aggressiveness among Offenders. *MDPI*. Retrieved from <https://doi.org/10.3390/rel9060182>
- Johnson, L., Gutridge, K., Parkes, J., Roy, A., & Plugge, E. (2021). Scoping review of mental health in prisons through the COVID-19 pandemic. *BMJ Journals*
- Jones, C. L., Jensen, J. D., Scherr, C. L., Brown, N. R., Christy, K., & Weaver, J. (2015). The Health Belief Model as an explanatory framework in communication research: exploring parallel, serial, and moderated mediation. *Health communication*, 30(6), 566–576. <https://doi.org/10.1080/10410236.2013.873363>
- Jones, M., & Capra, S. (2016). What do Prisoners Eat? Nutrient Intakes and Food Practices in a High Secure Prison. *Cambridge University Press*.
- Kahambing, J. (2021). *Philippine prisons and 'extreme vulnerability' during COVID-19*. *J Public Health (Oxf)*. doi:10.1093/pubmed/fdaa259
- Kalonji, M., Coninck, G., Ngongo, L., Ilunga, F., Albert, A., & Giet, D. (2020). Nutritional Status of Inmates in the Central Prison of Mbuji-Mayi, Democratic Republic of Congo. *Open Access Pub*.
- Khodaveisi, M., Omid, A., Farokhi, S., & Soltanian, A. (2017). The Effect of Pender's Health Promotion Model in Improving the Nutritional Behavior of Overweight and Obese Women. *Int J Community Based Nurs Midwifery*, 165-174.
- Kiani, M., & Paydar, M. (2021). Managing the Sports Status of Prisoners Leisure Time and Its Impact on Prison Violence. *Journal Management System*