**REVIEW OF RELATED LITERATURE**

**Domestic Abuse**

Domestic abuse occurs in homes and with the lockdown, it shows that victims are more likely to have increased risk of the abusers. “Stay-at-home measures including school closures have limited the usual sources of support for families and individuals such as friends, extended family or professionals.” (World Health Organization, 2020). Not all the lockdowns are great for the victims of domestic abuse, since this constrains their movements physically from the help they need that is available outside.

With the ongoing pandemic, it creates a surge of depressive occurrences that is currently happening to people. “The social isolation required by the measures taken in the different countries, the impact on jobs, the economic instability, high levels of tension and fear of the virus, and new forms of relationships have all increased levels of stress in the most vulnerable families and, therefore, the risk of violence.” (Pereda & Díaz-Faes, 2020). Moreover, the risk of being infected with the COVID-19 is still ever-present, leading to a potential high case of being infected.

**Online Platform**

Right now, there are ways to continue the learning through the online internet, however children are one of the most vulnerable to abuse even in cyberspaces. “Additionally, more time online may expose children to an increased risk of online sexual exploitation or bullying.” (Kuehn, 2020). This shows that the internet can still be one of the ways to exploit and abuse children.

There also exists cases where abusers in the pre-pandemic do continually violate their companions in their relationships. According to Campbell, J. (2020), “If domestic abuse is already a problem in a relationship, the coronavirus pandemic might be making it worse.” Meaning that pre-existing conditions and circumstances in the affair can greatly affect it.

**COVID 19 Pandemic**

Abusers and victims of abuse have been around more than the pandemic. “No less than the battle against the COVID pandemic, the battle against the abuse pandemic is certain to be an ongoing one.” (Klugger, 2021). The ongoing pandemic brought more implications to society, concluding that the viral infection is not only just the worst-case scenario.

Along with the one after another losses of individuals due to the pandemic, their anxiety heightens. “Stress has also been a big factor during the pandemic and is often brought about by the loss of a job and health fears.” (Calleja, 2020). The assurance of every individual's prosperity plummets as the spread of the COVID-19 virus.

Mental wellbeing is also one of the major health aspects to look out for. “For survivors of gender-based violence locked down in their homes with an abuser, the COVID-19 pandemic is only one of the compounding crises that threaten their physical and mental health.” (Gonzalez, 2020). These impacts of abuse can inflict psychological trauma, influencing the victims’ mental health.

With protocols and mandated rules to follow, more and more people are staying at home. However, this also restrains activities and authoritative actions that may be helpful to the potential abused victims. “Due to restrictions on movement, it’s more difficult for people to escape and easier for loved ones to miss the signs that something is wrong.” (Wallace, 2020). Along with the victim’s continual deterioration of their health, they cannot seek help themselves alone.

According to the post on the website of Makati Medical Center (2020), “The limited movement allowed during quarantine makes it difficult for them to call for help.” This implies that in the lockdown periods, abusers can maltreat more of their victims than the pre-pandemic times. Having active social help that is promoted by certain individuals and authorities is also one way to combat domestic violence.

Even without the lockdown or the pandemic, help was not readily accessible to them. “And when the pandemic is over, victims of domestic violence and their children will continue to need help.” (Richards & Nix, 2021). With the rising cases, this cannot go unnoticed to the public as time goes by.

**Android Application**

Based on the study, the application of the Theory of Planned Behaviour in the research conducted by the proponents of the World Conference on Gender Studies in Malaysia is effective in determining the factors of reporting of child abuse cases. The aforementioned theory explained that it showed crucial points and information about human behavior through the level of beliefs and assumptions. These findings from the results can pinpoint the problems in intervention of child abuse cases or change existing policies that can help the authorities carry out duties more effectively.

On a function in the android application Abhaya, an android application for the safety of women, it uses Global Positioning System to track users and send their location to the application. Furthermore, it also contacts their immediate registered person in their contact numbers that alerts them and sends their location using a Google Map link every five minutes. The user can provide four available contacts in the app namely a Police Officer, their families and loved ones.

Visual Information Reporting is also regarded as one of the main features in the app Relayvio that documents domestic violence. Photos from the aftermath of the abuse is seen here as it shows the physical damage dealt by the abuser by providing a picture of the users’ wounds and injuries. This app is useful in documenting abuse as it captures the images, date, and notes that can help to inform the authorities, friends, and families.

**Risk Assessment Application**

One of the most commonly used in assessing risk is the Danger Assessment found in the Mobile Application for Survivors of Domestic Violence. It contains two parts, the calendar part and the instrument part. The calendar part can mark dates where abusive events are rated one to five based on the severity of aggressions. The instrumental part contains twenty items to answer and its result can predict the power of violence that occurred to the victim.

Having and creating an Awareness Module found in the application iJuanaHelpMo educates victims that can help to know their own rights, what resources they can find, and support that is applicable to any Filipinos regarding violence and abuse they experience inside their homes. In this application module, victims can read related laws and rights related to Violence Against Women and Children. They can educate themselves as it serves a series of references that is linked to their current state.

Due to lack of web-based systems or mobile applications, Malaysia previously does not have a means of handling out of available assistance to their potential domestic violence victims. Also, lack of manpower, funds, and resources of Non-Government Organization is also one of the primary causes of this. However with the cases rising, there are applications that started to launch to combat domestic violence but the application TINA (Think I Need Aid) provides additional features that can encourage users emotionally and psychologically by their numerous functions of the app. An example of this is the users participating in a domestic survivor group chat in WhatsApp and a free counselling with the Women's Aid Organization, a local non-governmental organization in Malaysia.

**Crime Report Application**

As with the rise of android mobile smartphones, its popularity and simplistic design became prominent to people as it has numerous functions and its portability. Therefore with this wide range of potential available users, in a certain function of We Safe App, a user can notify all users of the app to find missing persons. With their general appearance information and photograph provided by the user, other users will be notified through the app. This process of functionality can be used by the police to track down people who are potential criminals provided in their wanted list.

Users can add their friends and families into the contact information to the system as introduced in the Interactive Internet of Things for real time Crime Reporting as who they seem fit. In this way, the app alerts them first of the unexpected crime as the user sends alarms and current information about them. The individuals who were registered as immediate contacts can act swiftly as the app alerts them.

Furthermore, the contact system that alerts first their close relatives and friends is also seen at the study, Eyes and Apps on the Streets: From Surveillance to Sousveillance using Smartphones. According to the author, this is done to enhance the safety of the user. It also has an adding image function when users add an event in the app to provide possible evidence. This functionality can make documenting of abuses easier.

In a study from A Cloud-Based Crime Reporting System with Identity Protection, the informer uses an integrated circuit card or smart card to report an event even without his/her identity. The smart card will verify the identity of the reporter and can be used to log in the system without their identities being shown. Without compromising the reporter's identity information, their statements would hold more information and can provide more definite testament.

The proponents looked at similar research on the internet and identified additional elements that may be included in the suggested system. The proponents have been noticing the rising cases of domestic abuses happening in the Philippines alone appearing in the local news. Also, as seen from the related studies and literature domestic abuse is still happening and is increasing because of the pandemic. Due to the rise of the coronavirus pandemic, the help and the aids the victims normally get from these cases becomes more slow-acting due to the strict implementations of social distancing and the stay-at-home order.

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