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Profile, Patterns of Intake and Perceived Side Effects of Over-The-Counter Non-Steroidal Anti-Inflammatory Drugs

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Abstract

One of the ways in which body pain can be relieved is by medications which are readily available. Over-the-counter Non-Steroidal Anti-inflammatory (OTC-NSAIDs) drugs are the most common for this purpose. However, OTC-NSAIDs are associated with side effects that range from mild to serious. In this context, the study aims to determine the profile of the respondents and their patterns of intake of OTC-NSAIDs and its perceived side effects. A descriptive type of research was utilized to profile the 90 respondents selected through purposive sampling technique. Majority of the respondents were female, with age groups are 40 and above and 40 and below and are mostly employed. The respondents' intake of the OTC-NSAIDs were according to the most frequent causes namely: headache, backache, body ache and shoulder pain. The study revealed generic mefenamic acid, 250mg as the medication taken for up to two days or after the pains eased to which the duration of intake lasted up to 6 months only, though there were respondents whose duration of intake lasted for 1 year or longer. Although there were side-effects such as drowsiness/sleepiness, abdominal pains due to acidity, dizziness, and mild diarrhea being experienced, most of the respondents depend on the non-steroidal anti-inflammatory drugs to relieve the pains they experienced.

Keywords: *dosage, intake, NSAID, OTC, pattern, side effects*

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1. Introduction

Optimum health is a prerequisite to being able to perform everyday tasks. It is foreseen as the absence of any manifestation of handicapped or irregularities including pain. Pain may be perceived differently depending on the threshold or tolerance of a person. However, the presence of pain, regardless of the origin, denotes alteration in the full functional potential of the individual. With the bothering effects, a person cannot perform the expected task and will look for pain relievers to augment the discomforts. These pain relievers can give immediate relief with the ultimate purpose of reducing the pain and the inflammation of the affected body part. Bothering pain may be categorized as mild to moderate such as migraine, dysmenorrhea, arthritis, sprains, muscle pain, headache, and toothache. The longer the pain persists, there are chances the affected person will take the drugs whenever necessary in order for the pain to feel alleviated.

Over-the-counter (OTC) drugs are medicines that are readily available for purchase, even without prescriptions. These are classified as Non-Steroidal Anti–Inflammatory Drugs (NSAID), which include analgesics like Ibuprofen (Advil, Alaxan), Naproxen Sodium (Flanax), Mefenamic Acid (Ponstan, Dolfenal, Panadol), and Aspirin (Bayer). These drugs are available in various milligram preparations. The use of these drugs is possible without a prescription, thus considered as self-medication. Self-medication is the selection and use of medicines to treat self-recognized and self-diagnosed conditions or symptoms (Ruiz, 2010).

The availability and accessibility to more drug stores made it possible for the more convenient purchase and consumption of any OTC drugs, and this could be done repeatedly with the recurrent appearance of symptoms. However, this is not safe due to the potential health risk of self–medication practice, and not to mention, the risk to adverse effects that could be experienced after prolonged use of these drugs, may it be for short term or for long term duration. Some of the untoward effects are hypertension, palpitations, congestive heart failure, edema, gastrointestinal complications, and kidney problems.

This study intends to explore the patterns of intake of OTC-NSAID of the respondents and specifically sought to answer the following:

1. What is the medical history of the respondents in terms of the existing body parts associated to perceived pain and involvement of seeking medical consultations?
2. What is the given respondent’s diagnosis upon seeking consultation?
3. What is the usually affected body part of the respondent when taking pain relievers?

4. What is the NSAID pain reliever that the respondent is taking in terms of type, dosage, brand, number of tablets/capsules per day, number of days of intake and duration of intake of the pain reliever?
5. What is the source of information that convinced the respondents in using the NSAID?
6. What is the usual means of acquiring the NSAID?
7. What are the perceived side effects of the OTC-NSAIDs?

2. Literature review

NSAIDs are medications that relieve or reduce pain and the most popular examples are ibuprofen and aspirin. These are taken for less severe types of pain that result from problems involving aches, painful cramps, those that involves fever and swelling or inflammation (MacGill, 2017). Moreover, these drugs have been used for many years as an analgesic, anti-inflammatory, and in the case of aspirin, antithrombotic. The use of these drugs can also be expected to increase due to the increasing age of the population as well as new and developing indications thus important to assess the safety and side effects (Russell, 2001).

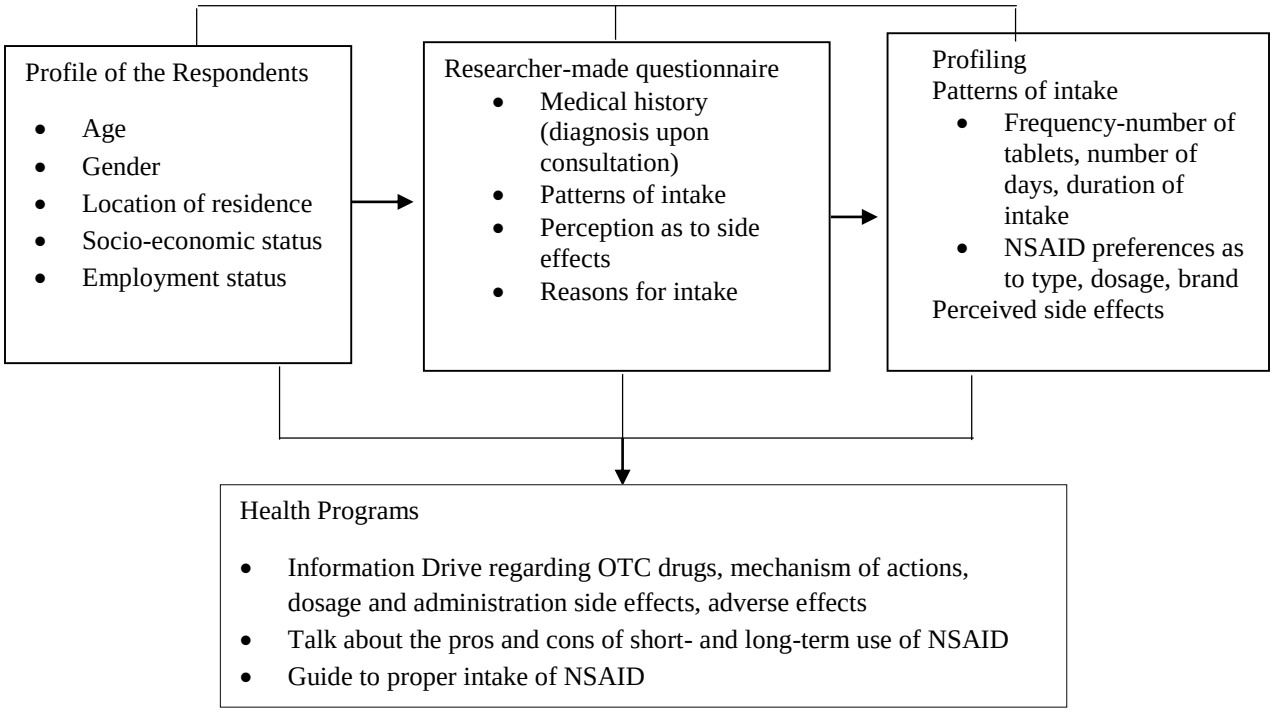
Medical experts agree that for most people there is no harm in taking NSAIDs for the occasional headache, fever, or muscle ache. Indeed, on any given day, millions of Filipinos use NSAIDs to soothe their daily discomforts. But these useful pain relievers also raise the risk of ulcers and heart problems in some people. NSAIDs are a common class of over-the-counter and prescription painkillers, and should never be taken regularly without discussing things with the doctor. Most over-the-counter painkillers should not be used for more than 10 days except aspirin (The painless truth about NSAIDs, 2009). Furthermore, preventable adverse drug reactions are responsible for 10% of hospital admissions among older people and NSAIDs are responsible for 30%of hospital admission (Davis et al., 2011). However, older persons, those who are taking anticoagulants, and those with a history of upper gastrointestinal tract bleeding associated with NSAIDs are especially at high risk. Although aspirin is cardio protective, other NSAIDs can worsen congestive heart failure, can increase blood pressure, and are related to adverse cardiovascular events, such as myocardial infarction and ischemia (Heintzman et al., 2009).

Moreover, it was one of the most commonly prescribed pain medications, a highly effective drug for pain and inflammation. However, these are known to have multiple adverse effects on one's health condition which includes gastrointestinal bleeding, cardiovascular side effects, and NSAID induced nephrotoxicity (Wongrakpanich, 2018).

A study revealed that increasing consumer awareness of the need to consider potential risks prior to taking OTC analgesics is a positive sign. However, this is not translated to an increase in the appropriate use of the OTC-NSAIDs since it has become readily available to pharmacies and fewer people are paying attention to the literature. Since OTC analgesics including NSAIDs are frequently and inappropriately taken, the need for educational intervention in the consumption of such drugs towards both physicians and patients appears warranted (Stosic, 2011). It is therefore the intention of the study to determine the prevalence of the use of OTC-NSAID, the pattern of use, medical history, perceptions, and reason for intake among the selected respondents.

Figure 1

Research Paradigm



The research paradigm shows the input, process and output. The input is set in determining the profile of the respondents in terms of age, gender, location of residence, socio-economic status, and employment status. A researcher-made questionnaire was utilized to provide the data needed for this study. In relation to the profile, the respondents' medical history and their patterns of intake of OTC-NSAIDs were also considered. The medical history particularly pertains to the diagnosis obtained upon consultation with a medical expert and a prescription of NSAIDs was given. The data gathered entails an appreciable view of the profile of the respondents, their patterns of intake and the perceived side effects of OTC-NSAIDs. The results will be subsequently used as a basis to formulate a health information drive. This will be part of the extension program of the Biology Department under the College of Arts and Sciences of the San Pablo City Campus.

3. Methodology

This paper is descriptive research that uses purposive sampling technique, and is limited to residents of San Pablo City, Laguna. The sampling technique used in the study allowed the researchers to select only those who are using OTC-NSAIDs. A preliminary survey was conducted to determine the OTC-NSAIDs user whose duration of intake are six(6) months and onwards to 200 respondents. Out of the 200, only 100, 50 whose location of residence are in the barrio and 50 from the city proper were given the final survey questionnaires and were included as the respondents of the study. The study was able to retrieve a total of ninety (90) survey questionnaires, 47 from the barrio and 43 from city proper.

Researcher-made questionnaires for both the preliminary and final survey were utilized and administered using Google Forms through email and Face book messenger. The respondents were given assurance that medical information provided are information resource only and not to be used or relied on for any diagnostic or treatment. The survey questionnaire used in the study only required the respondents to select applicable answers from objective response questions. The indicators included in the questionnaire comprises of socio-demographic profile, medical history, patterns of intake, reasons for intake and side effects. The Frequency and Percentage were used as the statistical tools in profiling the respondents in terms of their patterns of intake and perceived side effects of over-the-counter non-steroidal anti-inflammatory drugs or OTC-NSAIDs.

As to the profile of the respondents, Table 1 shows the selected city proper and barrio residents of San Pablo City included in the study. Among the ninety respondents, 71.1% were female, 25.6% were male, and 3.3% came from the group of LGBTQ+. The highest percentage of females may attribute to their interest in answering the questionnaire since they are more vulnerable to sickness compared to males especially when they age. The low frequency of LGBTQ+ acquired randomly.

Responses from two age groups, 40 and below, and 41 and above are well represented, having a frequency percentage of 52.2% and 47.8% respectively. It is said that age-related changes in pain sensitivity is inconsistent (El Tumi, 2017). This suggests that both age groups are bothered by their pains and take anti-inflammatory drugs. Likewise, regardless of where they reside, in the city proper or in the barrios, 47.8% and 52.2%, both groups were to take anti-inflammatory drugs whenever they are in pain. Hence the reassurance of preventing and abating pain before it even occurs, the tendency of one to stock or restock pain relievers becomes necessary regardless of the respondents' place of residence.

Table 1

Socio-demographic Profile of the Respondents

Profile of the Respondents	Frequency	Percentage
Gender		
Male	23	25.6
Female	64	71.1
LGBTQ+	3	3.3
Age		
40 and below	47	52.2
41 and above	43	47.8
Location of Residence		
City Proper	43	47.8
Barrio	47	52.2
Socio-economic status		
Php 15,000 and below	33	36.7
Php 16,000 and above	57	63.3
Employment status		
Employed	45	50.0
Self-employed	14	15.6
Unemployed	31	34.4

n = 90

Most of the respondents made their lives easier as 63.3% have an income higher than sixteen thousand pesos while only 36.7% have an income of below fifteen thousand pesos. Fifty percent of the

respondents were employed, 34.4% were unemployed and only 15.6% were self-employed. A study suggested that when someone from a workplace experiences pain, it may lead to loss of productivity due to absenteeism (Adams, 2021). In addition, one tends to have lesser income due to inability to work as a consequence of pain.

4. Findings and Discussion

The subsequent results are presented and discussed with reference to the aim of the study and that is to determine the medical history of the respondents, patterns of intake of over-the-counter non-steroidal anti-inflammatory (OTC-NSAID) drugs and its perceived side effects.

1.1.Medical History of the Respondents

The medical history of the respondents was also considered in the study. This was limited the existing body parts associated to perceived pain and involvement of seeking medical consultations.

Table 2

Body parts associated to perceived pain

Perceived pain	Frequency	Percentage
Headache	68	75.56
Backache	57	63.33
Body ache	42	46.67
Shoulder pain	40	44.44
Toothache	33	36.67
Leg pain	27	30.00
Joint pain	15	16.67

Table 2 depicts the frequency distribution of respondents' body parts associated to perceived pain as medical conditions. People normally have reasons why they take OTC-NSAIDs. Respondents perceived and identified several types of pain which they addressed by taking OTC-NSAIDs. Among the ninety (90) respondents, who gave multiple answers on their perceived pains, 68 (75.56%) frequently have headaches, 57 (63.33%) backaches, 42 (46.67%) for body ache, 40 (44.44%) for shoulder pain, 33 (36.67%), for toothache, 27 (30.00%) for leg pain, and 15 (16.67%) suffer from joint pain. Most of the respondents are having headaches,

backaches, body aches, and shoulder pains, these conditions usually seen from the respondents who were employed (50%) and self-employed (15.6%) and considered to be work-related pains. The impact of headache calls for intervention in the workplace not only to promote a prompt diagnosis of the different forms of headaches but also to improve work organization (Magnavita, 2022). As to back pain, Iker (2019) stated that 20% were told by a health professional that their pain was work-related. Regardless of cause, low back pain can affect a person's ability to perform work tasks.

Table 3

Involvement of Seeking Medical Consultations

	Frequency	**Percentage**
Consultation with a Doctor	50	55.6
Do not seek consultation with a doctor	35	38.9
Cannot recall if seek consultation with a doctor	5	5.6
Total	**90**	**100.0**

Table 3 presents the frequency distribution of respondents' medical histories in terms of medical consultations. It is also natural that anybody experiencing pains seek medical advice as 55.6% consult with their doctors whenever they have it. But there are 38.9% who do not consult with their doctors and instead take self-prescribed drugs such as anti-inflammatories. Still, there were 5.6% who do not recall if they were able to consult, maybe they did not really seek medical advice, and just like those who do not meet with their doctors, practice self-medication. Doomra and Goyal (2020) revealed that NSAID and self –medication frequently for the relief of pain and inflammation and that patients may procure and take easily without any prescriptions. The need to consult a medical practitioner so as to determine the type of OTC-NSAID to be taken for the affected body part. However, a continuous use of OTC-NSAID for more than 3 days for fever and 10 days for pain is not recommended unless advised by a doctor who will monitor the possible side effects. Moreover, if the ongoing prescribed OTC-NSAID is not effective, then the doctor may prescribe a new medication. (Cleveland Clinic, 2020).

1.2. Diagnosis Upon Seeking Consultation

Table 4

Respondent's diagnosis upon seeking consultation

Diagnosis	Frequency	Percentage
Respiratory related symptoms	33	66
Gastrointestinal problems	11	22
Hypertension	10	20
Cardiovascular problems	3	6
Kidney problems	1	2
Diabetes	1	2

Table 4 shows the frequency distribution of respondents' diagnoses among those 50 respondents who seek consultation. There were respondents who have more than one existing condition. There were 33 respondents who have indicated an answer of mostly associated with respiratory-related symptoms. There were 11 respondents who have gastrointestinal problems, who needed to consider certain precautionary measures in taking OTC-NSAIDs. Moreover, there are also diabetics and those with cardiovascular and kidney problems which requires extra care when it comes to intake of OTC-NSAIDs giving due considerations on the possible side effects if not properly taken.

The pain experience may be relevant to respiratory-related symptoms. OTC-NSAIDs are widely used to treat common cold associated with pain and fever. Though some others are still due to gastrointestinal problems and hypertension, who commonly experience backache and headache (Meneghetti, 2020). Thus, when OTC-NSAIDs are used regularly over an extended period of time, as is often the case with chronic pain, the potential for side effects increases. (Jacques, 2022). Individuals with existing conditions who sought consultation require to have regular monitoring from their attending physicians.

1.3. Pain Reliever Use

Table 5 shows the frequency distribution of respondents' affected body parts that cause the respondents to use pain relievers. The respondents identified more than one affected body parts which they treated with OTC-NSAIDs.

Table 5

The affected body parts that cause the respondents to use pain relievers

Affected Body Parts (Cause)	Frequency Percent	Percentage
head	53	58.89
back	45	50
body	33	36.67
shoulder	28	31.11
joint	10	11.11

Pain relievers are commonly taken whenever they are experiencing pain. Most of the respondents take pain relievers if they are experiencing pain in their heads with a frequency of 53 and a percentage of 58.89%. Almost everyone gets headaches and usually disrupts one's activity (Mayo clinic, 2019). The best way so as not to hamper their activities during headaches is to take medicines.

1.4. Non-steroidal Anti-Inflammatory Drugs (NSAID) Pain Reliever Use of the Respondents

1.4.1. Type of Pain Reliever

Table 6

Type of Pain Reliever

Type of Pain Reliever	**Frequency**	**Percent**
Mefenamic acid	38	42.2
Ibuprofen	30	33.3
Diclofenac	16	17.8
Celecoxib	4	4.4
Naproxen	2	2.2
Total	**90**	**100.0**

Table 6 shows the frequency distribution of OTC-NSAID pain reliever type the respondents are taking. There are a lot of pain reliever drugs available in the market and one is the non-steroidal anti-inflammatory drugs. Most of the respondents take anti-inflammatory drugs such as mefenamic acid and ibuprofen which have a frequency percentage of 42.2% and 33.3%,

respectively. Among the OTC-NSAIDs, prescription doses of Ibuprofen have greater antipyretic and analgesic effects in both children and adults compared with commonly used doses of acetaminophen (Masaleuskaya, 2015). Both the branded and the generics are easily accessible as they are greatly available in both public and private pharmacies (Batangan and Juvan, 2009).

1.4.2. Dosage of Mefenamic Acid intake

Table 7

Intake of Mefenamic Acid Dosage

Brand Name of Mefenamic acid	Frequency	Percent
Ponstan 250	4	4.4
Ponstan 500	7	7.8
Dolfenal 250	6	6.7
Dolfenal 500	9	10.0
Generic 250	39	43.3
Generic 500	25	27.8
Total	**90**	**100.0**

Table 7 shows the frequency distribution of intake of Mefenamic Acid dosage. In terms of dosage of pain reliever, mostly take 250 mg of mefenamic acid, and do not pay attention to the brand, since generics are less expensive. Ponstan and Dolfenal, at 500 mg dosage is more frequently taken than the 250 mg. The higher dosage is more preferred than the lower dosage, which may imply that consumers do make sure that with the price they pay, they could surely get well. Batangan and Juvan (2009) stated that overall indicators show that key essential medicines.

1.4.3. Brand Names of Ibuprofen, Naproxen, Celecoxib and Diclofenac Used

Table 8 displays the frequency distribution of NSAID pain reliever, various brands of ibuprofen, naproxen, celecoxib and diclofenac that respondents are taking.

As to the brand, price is a major concern. From the table, generic drugs are more frequently bought and taken. Though Ibuprofen, Alaxan, and Advil brands are more frequently bought, they may consider as fast-moving brands compared to others like Flanax and Celebrex. Likewise, the price of Flanax and Celebrex is quite high. Moreover, as to Diclofenac, generic is

also cheaper than the branded like Voltaren. While many of the respondents chose any brand will do for them, which may account for the drug that is readily available from the store/pharmacy they visited, or they are not really decided on which drug to take. The purchase of generic drug might be due to the fact that the prices of originator (branded drugs) were more than 30 times and the prices were ten times the international reference price in both public and private sectors (Batangan and Juban,2009).

Table 8

Brand Names of Ibuprofen, Naproxen, Celecoxib and Diclofenac Used

Brand Name of Ibuprofen	**Frequency**	**Percent**
Any brand will do	25	27.8
Alaxan	22	24.4
Advil	22	24.4
Generic	21	23.3
Brand Name of Naproxen		
Any brand will do	34	37.8
Flanax	19	21.1
Generic	37	41.1
Brand Name of Celecoxib		
Any brand will do	38	42.2
Celebrex	13	14.4
Generic	39	43.3
Brand Name of Diclofenac		
Any brand will do	26	29.9
Voltaren	25	27.8
Generic	39	43.3

1.4.4. Number of tablets/ capsules taken of NSAID per day

Table 9 shows the frequency distribution of the number of tablets/capsules per day of NSAID pain reliever that respondents are taking.

Table 9

Number of Tablets/Capsules per Day

Number of tablets/capsules (per day)	Frequency	Percent
1	26	28.9
2	11	12.2
3	7	7.8
Whenever I feel the pain	46	51.1
Total	**90**	**100.0**

As many painkillers had been available over the counter, many people just bought them without a prescription. There are 51.1% who said that they just take them during the times when they experience pain, and when got to rest or sleep, as the pain had been relieved, they do not take the drug again. There are 28.9% who took the drug once a day until the pain eased or became tolerable. But there are still those who took the drug twice (12.2%) or thrice (7.8%) a day. These people may have a short pain threshold that they need to take the drug more than once. Zelman (2020) stated that NSAID are effective to relieve pain and inflammation, it can be bought over the counter without any prescriptions.

1.4.5. Number of Days of Intake of the NSAID Pain Reliever

Table 10

Number of Days of Intake of the NSAID Pain Reliever

Number of Days of Consumption	Frequency	Percent
1 to 2	72	80.0
3 to 4	12	13.3
5 to 7	6	6.7
Total	**90**	**100.0**

Table 10 presents the frequency distribution of the number of days of intake of the NSAID pain reliever.

As many painkillers had been available over the counter, many people just bought them. Likewise, with the duration of intake of the pain reliever, there are still some people who prolonged their taking of the drug, 6.7% among the respondents lasted for 5 days until a week. But most of the respondents, 80%, last their medication up to two days. Goldstein and Cryer

(2015) revealed that the most commonly used classes of medications and associated with the risk of upper GI complications can occur even with short term or linear over time continued use.

1.4.6. Duration of Intake of the NSAID Pain Reliever

Table 11 shows the frequency distribution of the respondents' use of NSAID pain relievers in terms of duration of intake. In terms of the duration of their intake of the NSAIDs, most of the respondents (63.33%) said that their intake lasted for 6 months. Some others, 26.67% lasted for more than a year and only 10% lasted for one year. The data may serve as the basis for respondents who may suffer or experience problems in their gastrointestinal tracts particularly those who take mefenamic acid. Carter (2019) claimed that mefenamic acid may increase the risk of stomach problems such as bleeding or peptic ulcers.

Table 11

Duration of intake of NSAID pain reliever

Time Frame	Frequency	Percent
6 months	57	63.33
1 year	9	10.0
More than 1 year	24	26.67
Total	**90**	**100**

1.5. Relevant Data on Non-Steroidal Anti-Inflammatory Drugs (NSAID) Pain Reliever Use

Table 12

Source of NSAID Pain Reliever Information

Source of Information	Frequency	Percent
Prescription	49	54.4
Pharmacist	15	16.7
Relatives	11	12.2
Advertisements	10	11.1
Friends	4	4.4
Social Media	1	1.1
Total	**90**	**100.0**

Table 12 shows the frequency distribution of the source of NSAID pain reliever information.

NSAIDs can be bought from pharmacies without any prescriptions. It is even available from small stores. But still many of the respondents (53.8%) bought these drugs with prescription. This may account for those respondents who seek medical advice from their physicians whenever they experience pain. Some others only ask the pharmacist which is good for pain relief as they may not have enough time to visit their doctors (17.6%). Twelve percent relied on their family members, 11% on advertisements, 4.4% on friends, and only 1.1% relied on what they have seen on social media. The findings coincide with the study of Khan (2016), which revealed that the physician responsible for the issuance of prescription to the patient were perceived as the most reliable source of NSAID information, followed by pharmacist. Similarly, physicians were perceived by patients as the most reliable source of information on knowledge of NSAID side effects and contraindications followed by media and relatives/friends (Chen, 2014 as cited by Ho, 2020)

Table 13

Source of NSAID Pain Reliever

Source of NSAID	Frequency	Percent
Pharmacy	86	95.6
Convenience store	4	4.4
Total	**90**	**100.0**

Table 13 shows the frequency distribution of the means of acquiring NSAID pain relievers. NSAIDs can be bought over the counter and they are available in all pharmacies. There are some sari-sari (convenience) stores where one could buy from. With the survey conducted, most of the respondents (95.6%) bought their anti-inflammatory drugs from the pharmacies, being aware that medicines are best bought from reliable shops. The 4.4% who bought their anti-inflammatory drugs from sari-sari stores could be that they need the drug right away and have not had enough time to go to the pharmacy. Phueanpinit (2018) argues that NSAID are widely dispensed without a prescription from pharmacist.

1.6. Respondents' Perceived Side Effects of NSAID Pain Reliever

Table 14

Perceived Side Effects of NSAIDs

Side Effect	Frequency	Percent
drowsiness/sleepiness	71	78.89
abdominal pain	22	24.44
dizziness	8	8.89
mild diarrhea	6	6.67
vomiting	2	2.22

Table 14 reveals the frequency distribution of the respondents' perceived side effects of NSAID pain relievers.

Anti-inflammatory drugs ease the pain individual experiences, but sometimes, even if they ease the pain one has, they still have undesirable side effects (MacMillan, 2015). There are a number of side effects associated with NSAIDs such as abdominal pain due to acidity, nausea, heartburn, mild diarrhea, and drowsiness/sleepiness or light-headedness particularly Ibuprofen (Barrell, 2020). There are respondents who experienced more than one side effects. The 71 out of 90 or 78.89% who may have experienced drowsiness and light-headedness might have associated it with sleepiness. But just the same, as they experience this side effect, they tend to rest and sleep. There are 22 out of 90 or 24.44% who feel abdominal pain due to acidity, dizziness is 8 out of 90 or 8.89 %, the difference in their stool is 6 out of 90 or 6.67% and vomiting is 2 out of 90 or 2.22%. These side effects usually disappear.

5. Conclusion

This study was conducted to determine the profile and patterns of intake of NSAIDs that is commonly used and available in the Philippines. Over-the-Counter NSAID is the most prescribed and widely used medicine to relive pain, reduce swelling (inflammation), and lower high temperature. The perceived side effects of NSAIDs were also identified in the study. The patterns of intake of NSAID pain relievers, the type, dosage, brand, number of tablets/ capsules taken per day, number of days and duration of intake were determined.

Based from the results, the most frequent causes of anti-inflammatory drugs intake were headache, backache, body ache, and shoulder pain which were accounted for the patients' tiredness. Many

were able to seek advice from their physicians. Of which, many found out that the pains they experienced originates from respiratory related symptoms, gastrointestinal problems and hypertension.

As there are many anti-inflammatory drugs available over the counter, the most frequent drugs bought were 250 mg of generic mefenamic acid and ibuprofen of no particular brands which can be accounted for from the advice of doctors, pharmacists, relatives, or as seen in the ads. They usually took the medication for up to two days or after the pains eased. In terms of the duration on how long they take the medication, most lasted up to 6 months only, though there were respondents who lasted their intake to 1 year or longer. The brand is not an issue among respondents as most of them relied on the generics, which they normally bought from pharmacies rather than from convenience stores.

Despite the presence of perceived side-effects whenever respondents took NSAID such as drowsiness/sleepiness, abdominal pains due to acidity, dizziness and mild diarrhea, most of the respondents still manifest being dependent on the anti-inflammatory drugs seeking to relieve the pains. The use of NSAID is due to the availability, accessibility, effectivity and affordability. This is the same reason why they utilized the said drug of choice for pain and inflammation.

A similar study could be done with various groups of high-risk individuals who are taking NSAID such as those with gastritis, hypertension, and renal problems. Further, correlational study involving the patterns of intake, side effects and the profile of the respondents could be given priority. The study among elderly who are still using NSAID could be given priority and a case study can also be considered with those NSAID users who have existing conditions such as those with cancer.

The findings from this study will serve as the basis for the development of info-drive materials and as a guide in the program implementation in order to create a well-informed NSAID users. Emphasis on the patterns of intake could be given proper attention. specifically, to those NSAID users who experienced gastrointestinal side effects on the know-how and precautionary measures.

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