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ORIGINAL RESEARCH PERIOPERATIVE MEDICINE

The knowledge and attitudes of healthcare professionals of an orthopedic ward regarding opioid administration: a Caribbean perspective

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ABSTRACT

Background & Objective: Opioids remain the mainstay of management of postoperative pain, despite a number of associated side effects and a chance of habituation or even addiction. This study aimed to look at the knowledge and attitudes of Health Care Professionals (HCPs) towards opioid use as the both of these directly impact management of post-operative pain in surgical patients.

Methodology: A questionnaire like the one used in a Taiwan study by Luo Ping Ger et al. was administered. A total of seventeen questions were used to evaluate knowledge and attitudes towards opioid use using a 5-point Likert scale ranging from Strongly agree to strongly disagree. The questionnaire was administered to HCPs at various levels who were involved in the treatment of the orthopedic patients.

Results: The paucity of knowledge about opioids and the methods of administration leads to poor attitudes regarding opioid prescribing, administration, and side effect profile. This would, in turn, lead to general noncompliance by nursing staff regarding administration of the drug. Also, it was determined in the survey that a notable percentage of HCPs may not know what to do if there was a side effect related to opioid administration, as there was a general lack of knowledge about how to recognize and precautionary measures to be instituted.

Conclusion: Most health care professionals had a positive attitude regarding respiratory depression and opioids; however, this was not seen with the other side effects such as abdominal distension, nausea and vomiting, and constipation where negative attitudes were expressed by the senior nursing staff. This may be attributed to lack of continuous medical training regarding pain management on the ward.

Key words: Health Care Worker; Opioids; Orthopedics; Pain, Acute; Pain, Perception; Pain, Relief; Pain, Attitude

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1. INTRODUCTION

This study aimed to look at the knowledge and attitudes of Health Care Professionals (HCPs) towards opioid use as these directly impact the post-operative pain management in patients.

The questionnaire evaluating knowledge and attitudes towards opioid use, asked 17 questions. Questions 1-9 and 11-13 were questions related to attitude. Questions 14-17 were related to knowledge towards opioids and side effects. A Likert scale ranging from strongly agree to strongly disagree graded from 1 to 5 was used in the evaluation adapted from a Taiwanese study by Srisawang et al.[1]

Recent studies of HCPs, in particular nurses, demonstrated a significant lack of knowledge in theory and application of analgesic drugs, particularly the use of requested additional pain relief, they had either

developed tolerance to the drug or was psychologically addicted. Substantial knowledge deficits were identified, although more than half of the physicians' preferred pethidine.

A study done in Thailand by Srisawang P et al. also corroborates the above findings in the Taiwanese study by Lao Ping Ger et al,[2] where there was a significant knowledge deficit amongst Healthcare workers (62%) and policy makers/regulators (74%). One third of the physicians' vs 66% of policy makers demonstrated negative attitudes towards opioid use.

A cross sectional study done in Australia identified nurses' knowledge deficits and exaggerated fears of addiction and respiratory depression and lack of understanding of the principle of scheduling analgesia.[3] Consequently, the nurses might be unduly concerned with the negative attributes of opioids, rather than patient benefits such as mobility and pain relief.

One third of the nurses in this study said they would administer the least possible amount of prescribed as needed (p.r.n) opioid to a patient in pain and nearly half believed patients should be encouraged to have non-opioids rather than opioids. Purported explanations included lack of confidence in the ability of opioids to relieve pain and concerns about addiction, side effects of the opioids and undesirability of these side effects. These negative attitudes may persuade nurses not to administer them, and/or those who do administer opioids may aspirate to reduce rather than to relieve pain.

This 'knowledge and attitudes survey' was executed to identify any barriers to implementation of a new analgesic regime involving morphine for postoperative pain management due to negative attitudes or knowledge deficits encountered in HCPs in an orthopedic ward.

2. METHODOLOGY

Approval was obtained by University Ethics Committee and North Central Regional Health Authority for conducting the study. This was a prospective randomized controlled study. The study was a single-blinded study and data was collected from May to December 2018 (thirty-two weeks) in the adult orthopedic wards of the Eric Williams Medical Sciences Complex, a tertiary level teaching institution in Trinidad. The study was conducted to identify the HCPs' knowledge about pain management, assess their strengths and weakness in managing patients' pain, and help administrators to identify weaknesses in the education of HCPs regarding opioid use.

The questionnaire consisted of seventeen questions which were distributed in the orthopedic ward amongst doctors at different levels (consultant, registrar, house officer, student) and nurses (v), involved in the care of the orthopedic patients (Adult Surgical Ward 3 and Adult Surgical Ward 5) at the Eric Williams Medical Sciences Complex.

The questionnaire administered was like the one used by Luo Ping et al. A total of seventeen questions were used to evaluate knowledge and attitudes towards opioid use using a 5-point Likert scale ranging from strongly agree to strongly disagree. There were 2 main aspects evaluated in the questionnaire:1) questions 1-9, 11-13 were attitudes based and 2) question 14-17 were knowledge based.

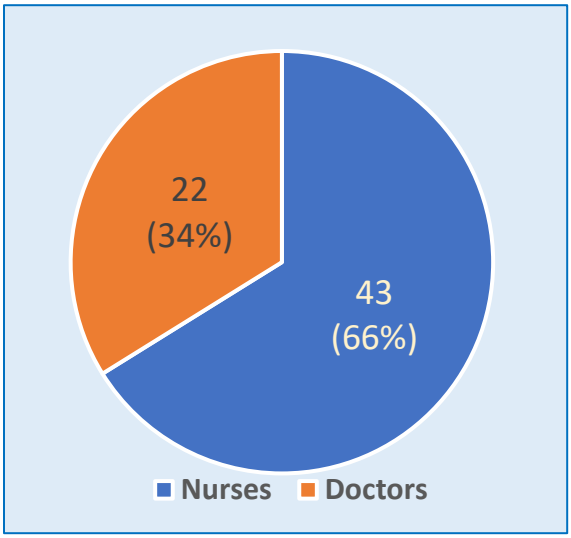

Figure 1: Pie chart representing % of doctors and nurses

3. RESULTS

A total of 65 questionnaires were answered by HCPs:

1) Overall satisfaction for males was 6.58 out of 10 and for females was 4.89 out of 10. Levine's test F = 1.062 (1, 70) = 0.306
2) Using Levine's test for homogeneity of variances, P > 0.05 indicated that the groups were homogenous.

Questionnaires were answered by doctors at different levels 22 (34%), and by nurses, 43 (66%) of all categories (Figure 1).

The category of nurses mostly consisted of registered nurses (36.9%), patient care assistants (18.5%), and student nurses (10.8%) and other 33.8%; the total number of nurses who filled out the questionnaire was 43 (Figure 2). The number of doctors who responded to the questionnaire was 22 with only 1 consultant and 2 registrars participating. Consultants represented 1.5%, registrars 3.1%, house officers 15.4%, intern 13.8% (Figure 3).

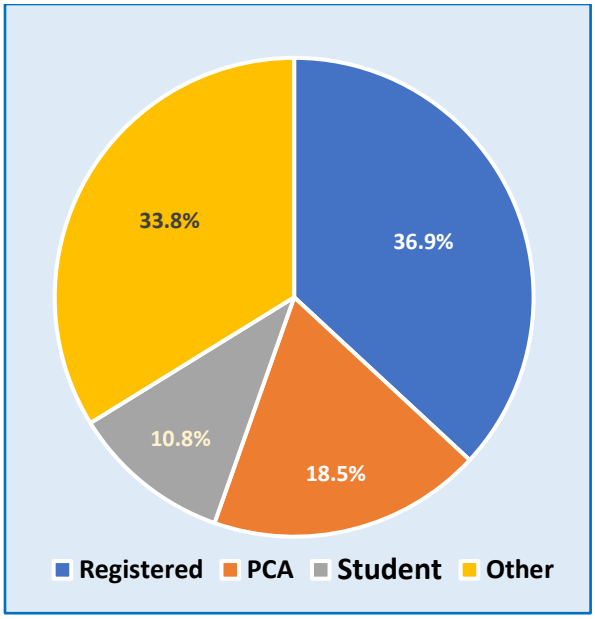

Figure 2: Chart showing percentage of nurses in each category

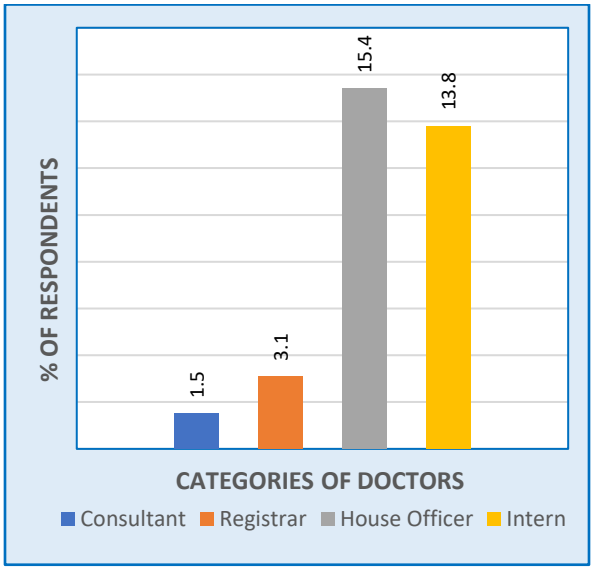

Figure 3: Seniority wise distribution of doctors

The questionnaire evaluated two major components:

1) The attitude of healthcare professionals with the use of opioids and side effects (question 1-9)
2) Attitude toward prescribing and administration (question 11-13)
3) The knowledge towards prescribing and administration of opioids (question 14-17)

The best Cronbach alpha for question 1 is achieved by excluding question 10

The best Cronbach alpha for question 2 is obtained by omitting question 13

The best Cronbach alpha for questions 1-9 was 0.647.

Multiple studies have shown that nurses are generally preoccupied with the negative attributes of opioids rather than with patient benefits such as comfort, mobility, and independence.[4,5] Data collected from the survey given to HCPs indicated that from question 1, 30% of HCPs had indicated a fear of overdosing and fear of drug tolerance. All HCPs were very cautious with the prescribing and administration of opioids regardless of demographic or seniority. This attitude was predominant amongst the junior house officers and interns (Table 1).

Question 2 also echoed the same result. 50% of doctors (predominantly junior doctors and interns) and 31% of nurses agreed that they would prescribe/administer opioids in a lower dosage to prevent drug addiction/tolerance. No senior doctors agreed with this (consultant or registrar).

Question 3 evaluated whether HCPs believed that opioids are not good drugs and that patients should bear as much pain as possible. Only 11% of doctors and 11% of nurses agreed with this. The majority (28% doctors and 67% nurses) disagreed with this statement. This demonstrated a positive attitude towards opioids; however, it was not translated into prescribing/administration practices (seen from the results of question 1 and 2)

Question 4 evaluated whether HCPs would encourage patients already bearing pain, to continue to do so. 18% of doctors and 35% of nurses agreed with this statement. A larger percentage of nurses (mostly RNs) agreed with encouraging this negative behavior compared to 11% of nurses from question 3 who said they would not insinuate to patients to bear severe pain. Most respondents, 68% of doctors and 47% nurses disagreed with encouraging patients who were already bearing severe pain to continue to do so. 14% of all HCPs had no opinion on the question. A larger proportion of nurses compared to doctors demonstrated a negative attitude towards patients bearing severe pain.

Question 5 evaluated perception of respiratory depression with opioid use. 32% of doctors and 51% nurses believed that opioids were strongly linked to respiratory depression. This included many RNs (senior nurses). From this study, it was observed that only 1 patient had an episode of desaturation (SpO_2 < 90%)

Table 1: Table corresponding to attitude of HCPs toward use of opioids and their side effect.

No.	Question	Opinion	Doctors	Nurses
1.	Careful of dosage of opioid when prescribing/administering to reduce tolerance/addiction	Agree	34 (100)	65 (97)
		Disagree	0	2 (3)
		No Opinion	0	0
2.	Lower opioid dose for tolerance prevention	Agree	17 (50)	20 (30)
		Disagree	14 (41)	36 (54)
		No opinion	3 (9)	11 (16)
3.	Encourage patients to bear pain	Agree	3 (9)	11 (16)
		Disagree	9 (26)	45 (67)
		No opinion	22 (65)	11 (17)
4.	Encourage patients to bear severe pain/no morphine	Agree	6 (18)	23 (35)
		Disagree	23 (68)	31 (47)
		No opinion	5 (14)	13 (18)
5.	No opioid as fear of respiratory side effects	Agree	11 (32)	34 (51)
		Disagree	20 (59)	32 (48)
		No opinion	3 (9)	1 (1)
6.	Less frequent opioid due to nausea and vomiting	Agree	25 (74)	29 (43)
		Disagree	6 (18)	20 (30)
		No opinion	3 (9)	18 (27)
7.	Less frequent opioid due to abdominal distention	Agree	22 (65)	29 (43)
		Disagree	8 (24)	18 (27)
		No opinion	4 (11)	20 (30)
8.	Less frequent opioid due to constipation	Agree	28 (82)	35 (52)
		Disagree	5 (15)	14 (21)
		No opinion	1 (3)	18 (27)
9.	More potent pethidine vs morphine	Agree	12 (35)	25 (37)
		Disagree	15 (44)	17 (25)
		No opinion	7 (21)	25 (37)

Data presented as n (%).

and was easily treated with supplemental oxygen. Most doctors (59%) did not believe that respiratory depression was a major side effect of opioids; however, almost half of nurses (49%) exhibited a negative attitude toward this side effect profile. Twelve percent of nurses (12%) had no opinion regarding respiratory depression and opioids.

Table 2: Table showing attitude toward prescribing and administration of opioids.

Q.	Question	Opinion	Doctors	Nurses
11	Prn dosing decrease harmful effects	Agree	26 (76)	40 (60)
		Disagree	8 (24)	20 (30)
		No opinion	0	7 (10)
12	Most prefer intravenous vs oral	Agree	17 (50)	45 (67)
		Disagree	6 (18)	17 (26)
		No opinion	11 (32)	5 (7)
13	Intravenous is more effective than po	Agree	29 (85)	48 (72)
		Disagree	1 (3)	2 (3)
		No opinion	4 (12)	17 (25)

Data presented as n (%).

Table 3: Table showing Knowledge towards prescribing and administration of opioids.

Q1	Question	Opinion	Doctors	Nurses
14	Absorption orally is slow	Agree	9 (26)	26 (39)
		Disagree	5 (15)	18 (27)
		No opinion	20 (59)	23 (34)
15	Patients with impaired renal function should not be given pethidine	Agree	22 (63)	35 (53)
		Disagree	8 (23)	8 (12)
16	Oral morphine has more side effects	Agree	11 (32)	34 (51)
		Disagree	14 (41)	20 (30)
		No opinion	9 (26)	13 (19)
17	Oral morphine undergoes significant 1st pass metabolism	Agree	20 (59)	25 (37)
		Disagree	3 (9)	5 (8)
		No opinion	11 (32)	37 (55)

Data presented as n (%).

Question 6 analyzed whether opioids would be prescribed infrequently or with lower dosage for patients who had severe nausea and vomiting. 72% of doctors and 56% of nurses agreed with the statement and 20% of all HCPs had no opinion (Table 2). As the question was not specific about the cause of the pain (severe pain could lead to nausea and vomiting), it was assumed that the HCPs were correct in the belief that opioids should be withheld or given less frequently to such patients. Only 18% of doctors and 30% of nurses wrongfully objected to this statement which included more RNs. This study demonstrated that only 5 patients (7% of the population) suffered from nausea/vomiting, and although a more frequent side effect, it was still a very small percentage.

Question 7 evaluated whether patients who had abdominal distension should receive opioids less frequently. 63% of doctors and 44% of nurses did not object to this statement and 23% had no opinion. Only 23% of doctors and 28% of nurses objected to this statement. Most of the HCPs correctly recognized that opioids could lead to abdominal distension. However, a large proportion had no opinion on the matter (23%). This could lead to patients developing constipation, nausea, and narcotic bowel syndrome.

Question 8 evaluated one of the side effects of opioids, constipation, and whether HCPs thought that opioid should be given infrequently or withheld if present. The overwhelming majority of respondents (81% doctors and 53% nurses) objected to this statement. 31% of HCPs had no opinion. A notable percentage (45% doctors and 26% nurses) disagreed with this statement. Constipation was the most frequent side effect of opioids found in this study with time to first bowel movement on day 2 for most patients.

Question 9 assessed whether HCPs believed pethidine was more potent than morphine. More doctors objected (45%) than agreed (36%) compared to more nurses who agreed (37%) vs. those who objected (26%). Pethidine does have a faster onset of action due to its greater lipid solubility compared to morphine. Morphine, although more potent, has a slower onset. The speed of onset may have given a false impression of the potency of the drug. This possibly gave a false impression to the nurses as they would be directly involved during administration of the drug.

Questions 11-13 evaluated HCPs attitude towards prescribing and administration of the drug.

In question 11, most of the doctors (77%) and nurses (60%) agreed with giving opioids in a PRN schedule to reduce harmful side effects. Only 23% of doctors and 30% of nurses disagreed. This showed that amongst all the HCPs there was a lack of knowledge resulting in a negative attitude towards prescribing opioids in a prn schedule with the premise of decreasing the harmful side effect profile (Table 3).

Question 12 evaluated whether HCPs think most patients prefer parenteral administration to oral administration. 50% of doctors and 67% of nurses agreed that patients prefer parenteral administration vs 11% of doctors and 26% of nurses who disagreed. 15% do not know whether patients prefer parenteral vs. oral administration. HCPs may be more comfortable with administering a drug like morphine or pethidine themselves as they are comfortable and familiar with this route of administration. Even when patients can tolerate orally, they are still given parenteral opioids. HCPs are less comfortable with morphine in liquid or tablet form due to unfamiliarity. Oral drugs such as oxycodone are not popular in the Caribbean.

Question 13 evaluated whether parenteral administration is more efficacious than oral administration in pain

management. 86% of doctors and 70% of nurses believe this to be true whilst 5% doctors and 2% of nurses believe this is false. Whilst opioids do undergo first pass metabolism and about 1/3 of the drug is lost to hepatic metabolism, this is adjusted for in the oral drugs. The dose of the oral preparation will be higher than that given parenterally. The overwhelming majority have a negative perception that parenteral is more efficacious as the speed of onset is faster parenterally which can create a false impression of the entire pharmacodynamics of the drug.

Questions 14-17 answer questions about knowledge towards prescribing and administration of opioids. The Cronbach alpha for these questions was 0.585

More doctors (27%) and nurses (40%) believe that absorption of morphine orally is slower than parenteral administration as seen from question 14. An even greater percentage (42%) had no opinion.

The same was true for question 15 where more doctors (63%) and nurses (53%) agreed that patients with impaired renal function should not be given pethidine. Approximately 28% had no opinion on the matter. Whilst it is noteworthy that most HCPs recognized that the metabolites of pethidine are secreted renally and thus should be avoided in renal impairment, a large percentage (almost 30% of HCPs) did not have an opinion.

Question 16 evaluated whether HCPs thought patients who received oral morphine complained of experiencing more side effects than those who were given parenteral morphine. More doctors disagreed (41%) than agreed (32%) with this statement. This contrasted with the nurses who agreed (51%) more than disagreed (30%). 22% of HCPs had no opinion. When compared with parenteral morphine, oral morphine does not cause increased side effects. Whilst there seems to be fair knowledge amongst the doctors, there was a knowledge deficit occurring amongst the nurses. About 1/5 of HCPs had no opinion.

Question 17 evaluated whether HCPs knew that morphine underwent significant first pass metabolism. Most of the doctors (59%) and nurses (37%) agreed with this statement whilst only 9% of doctors and 7% of nurses disagreed. Almost half of the HCPs (48%) had no opinion. The potency of parenteral to oral morphine is 3 times. Changing from parenteral to oral route necessitates the administration of double to triple doses. Controlled release preparations have been developed to further increase the convenience of oral preparations.

4. DISCUSSION

This was a 'knowledge and attitudes survey' of HCPs which was administered to different levels of staff. This would be the first step towards implementation of revised analgesic regimen for the postoperative patients on the orthopedic ward. As Visual Analogue Scale (VAS) score and overall patient satisfaction were better with morphine it was important to evaluate barriers towards its implementation.

Out of the 65 questionnaires administered, only one question concerning attitudes was left out. Questions 1-8 evaluated attitudes to opioid use. A Likert scale from strongly agree (indicating a negative response) to strongly disagree (indicating a positive response) was used.

The issue of drug addiction and tolerance was undertaken in question 1-2 of the survey. 100% of the doctors and 99% nurses agreed that opioid dosage should be reduced to prevent drug tolerance and addiction. Upon further questioning, 50% doctors and 31% nurses condoned decreasing the dose of the opioid administered for the same reason. These results were echoed in the study done in Taiwan by Luo-Ping et al. where 73% of HCPs indicated that they would be very careful in the control of opioid dosage and frequency. In general, most of the HCPs exercised extreme caution when prescribing or administering opioids and would underdose the patient to prevent drug addiction.

The Taiwanese study also noted that in the historical background of China, opium epidemic was wide-spread before it was banned in the 20th century. As a result, the legitimate use of these drugs is overshadowed by anxiety and fear whether conscious or subconscious.

Most of the doctors and nurses disagreed with patients bearing pain. Many of the doctors objected to this statement.

According to a paper written by C. Mac Pherson et al. from Grenada, another Caribbean Island, certain views which were widely held within this diaspora were identified such as "pain is God's will".[6] Historically, Trinidad underwent a long period of colonialism where religious beliefs were forced upon the slave population. This attitude of bearing pain with a religious twist is deeply ingrained in modern day society, possibly taught by elders, and passed down through the generations.

Mac Pherson et al. also identified that pain in the Caribbean was noted to be undertreated. Caribbean doctors rarely prescribed oral morphine and when it was prescribed, some nurses withheld it until they observe what they regard as signs of severe suffering. This was like the attitude seen in the study as most clinicians would withhold drug for fear of drug addiction/tolerance. Medical schools still do not teach current information about opioids or pain relief. Also, The paper also states that globally, the medicinal use of morphine is impeded by inadequate knowledge among HCPs and policy

makers, limited infrastructure and resources, and structural regulatory barriers.

Opioids are known for their side effect profile: the most feared one is respiratory depression. A significant percentage of doctors agreed that opioid should be withheld due to this side effect compared to the study by Luo-Ping et al. where only 10% of physicians would withhold the drug due to respiratory depression. However, from this study, only 1 patient (1.7% of the population) in the morphine group was found to experience desaturation <90%. This patient was treated with supplemental oxygen with good effect. Most of the doctors of nurses disagreed with this statement. One must acknowledge the fact that there were some positive attitudes regarding opioid use for analgesia, but it was not always translated into clinical practice.

Another side effect heavily associated with opioid was nausea and vomiting. 72% (25) doctors and 56% (25) agreed that they would give opioid less frequently due to this side effect profile. This was like the study in Taiwan, Luo-Ping et al., where 60% of practitioners would withhold the drug due to nausea and vomiting. Whilst it was noteworthy that the HCP acknowledged the association between the drug and side effect, in this study it was shown that only 5 patients out of 71 (7% of study population) experienced this. More concerning was the fear of it, and this would have been translated into clinical practice by withholding the drug due to fear or anxiety about a side effect that was particularly uncommon (as seen in question 1 of the survey).

The other side effect evaluated was abdominal distension. 63% (22) doctors and 44% (29) nurses agreed to withhold opioids and 23% had no opinion. Whilst it was commendable that most of the HCPs chose to withhold due to the association between the drug and side effect, about 20% of all HCP's had no opinion. This can lead to the potential harm to the patient and development of worsening ileus on the ward.

Constipation was the most common side effect seen in the study, with 52.8% of patients reporting first bowel action on Day 2 post op followed by 23.5% on Day 1. About 18% of respondents had no opinion concerning the association between opioids and constipation. This was concerning since it could result in patient discomfort and dissatisfaction. Most of the doctors 81% and nurses 53% would have dosed the patient less frequently due to this side effect like the study in Taiwan, where 44% would dose less frequently. Many HCPs demonstrated a positive attitude regarding this side effect. This non-life-threatening side effect could be easily treated with mineral or chemical laxatives and monitored on the ward.

Nurses (37%) and doctors (36%) believed that pethidine was more potent than morphine. Since pethidine has a higher lipid solubility than morphine, its onset is faster, and it crosses the blood brain barrier more quickly. Notwithstanding, morphine is known to be ten times as potent as pethidine as the dose of pethidine is almost ten times the actual dose of morphine; 45% doctors and 26% nurses disagreed with this statement and almost one-third had no opinion. This negative attitude could have led to other negative attitudes regarding patient preference for oral vs. parenteral opioids as the bias had already been set regarding parenteral administration of pethidine. The nurses would have been generally happy with the onset and sedative effect of pethidine given parenterally and would be hesitant to deviate from this.

in the survey had no opinion to some of the questions concerning knowledge of administration of opioids and general side effects.

Most of the respondents (42%) had no opinion; and 27% of doctors and 40% nurses agreed that oral absorption was slower. Whilst oral absorption is generally slower, the duration of action is good due to new adjuncts such as slow-release formulations. Mac Pherson et al. did acknowledge there is sparse education about opioids at the medical school level and there are infrequent updates to new formularies. In the Caribbean, there is heavy reliance on parenteral administration of strong opioids and the move to oral formulations has been slow. The negative attitude towards oral administration means that there are not many advocates for the conversion as there is a wrong perception without proper education concerning the oral preparations.

Almost one-third (28%) of HCPs did not know that pethidine should be withheld in patients with impaired renal function; 63% doctors and just over half, 53% nurses agreed that it should be withheld. The population in Trinidad has a high incidence of renal failure, due to hypertension, diabetes, and even sickle cell anemia. Some of the patients are even unaware of their renal impairment. WHO guidelines recommend against use of pethidine due to severe side effects and poor efficacy in sickle cell disease A stronger but safe opioid is recommended to treat such patients.

Many respondents (22%) had no opinion concerning whether oral morphine was associated with increased incidence of side effects such as nausea and vomiting compared with parenteral administration. Oral opioids are infrequently prescribed and culturally in a religious society overdosing on these drugs is frowned upon. Inevitably, some of these religious beliefs have infiltrated into the clinical conduct of medicine. There is an aversion to giving opioids orally and this may be extrapolated towards misconceptions surrounding oral administration due to unfamiliarity with the drug.

Almost half (48%) of the population of HCPs had no opinion on whether oral morphine underwent first pass metabolism. About one-third of the drug undergoes significant hepatic metabolism, the dose of the oral formulation is adjusted to provide good bioavailability. Since most of the respondents had no opinion on this, the drug may be inadvertently given to patients with hepatic dysfunction resulting in an overdose to the patient. This is a knowledge deficit which would affect the tendency of the HCP to lean towards using oral morphine as there is not enough continuing medical education regarding the new formulations of the drug and its pharmacokinetics. The HCP may not be familiar with giving such large doses to the patient and may even withhold the drug due to misguided preconceptions.

These results were echoed in both the Thailand study which showed a 62% knowledge deficit amongst physicians and in Taiwan (average knowledge deficit ~ 40%). The knowledge deficits were notable in question 14-17. Misconceptions about oral administration and tendency to lean towards what is familiar was predominant in these questions.

Regarding attitude towards prescribing and administration of the drug (questions 11-13), there were mixed attitudes. There was similar apprehension between doctors and nurses with varying responses.

Most of the doctors and nurses agreed that prn dosing decreased the harmful effects of opioids. Only 23% doctors and 30% nurses disagreed with this statement. The incidence of side effects was rare. Incidence of respiratory depression was 1.7% in this study. However, there was a negative attitude towards harmful side effects which would have led to an aversion from administering the drug in a therapeutic dose to optimize analgesia for the patient as seen in question 1.

In questions 15, 16, and 17 a notable percentage of respondents had no opinion regarding absorption portfolio, side effect profile, or pharmacokinetics of morphine respectively. Also, from question 9 it was observed that about 1/3 of the HCPs believed that pethidine was more potent than morphine due to quick onset of action and sedative effect. Therefore, it was observed that there was projection of this preconceived notion onto the patient because the HCP is generally happy with what is familiar to them and uncomfortable with what is not.

The paucity of knowledge about opioids and methods of administration has, therefore led to poor attitudes regarding opioid prescribing, administration, and side effect profile.[7] This would lead to general noncompliance by nursing staff regarding administration of the drug.

5. LIMITATIONS

The knowledge, practice and attitudes questionnaires were mostly filled out by nurses, but there was poor response from consultants and registrars (higher levels of staff).

6. CONCLUSION

The knowledge and attitudes survey identified that most of the healthcare professionals believed that opioids are good drugs and that patients should not be in pain or refuse their medication. More positive attitudes were seen amongst senior doctors compared to senior nurses.

Most healthcare professionals had a positive attitude regarding respiratory depression and opioids; however, this was not seen with the other side effects such as abdominal distension, nausea and vomiting, and constipation where negative attitudes were expressed by the senior nursing body. This may be attributed to lack of continuous medical training regarding pain management in the ward.

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8. Conflict of interest

Authors declare no conflict of interest

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