

Original Research Article

Knowledge and Attitudes of Anesthesia Staff on Pain in the Hospitals of Niamey

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Article History

Received: 26.07.2023

Accepted: 31.08.2023

Published: 14.11.2023

Journal homepage:

<https://www.easpublisher.com>

Quick Response Code



Abstract: *Aim of the study:* To assess the knowledge and attitudes of anesthesia staff on the management of pain in the hospitals of Niamey. *Patients and method:* This was a multicenter descriptive cross-sectional study carried out in five hospitals in Niamey (Republic of Niger) from July 3rd to December 3rd, 2021. Were included in the study, all the anesthesia staff who agreed to answer the questionnaire. The variables studied were: age, gender, seniority, sector of activity and qualification, definition of pain, different types of pain, the impact of pain on the body, tools used for assessment of pain, difference between acute and chronic pain, knowledge about analgesics, the practical attitudes of pain management. The data were entered and processed with Epi info 7.2 software and the Microsoft Office 2019 pack. *Results:* Our study concerned 106 agents from the anesthesia and resuscitation department of the hospitals that served as our study framework. There is a female predominance of 55.42% with a sex ratio of 0.80. The 45-54 age group was the most represented with 40.07% of cases. The average age of respondents was 44.95 ± 8.9 years. Anesthesia nurses were the most represented with 90.36%. The operating theatre unit was the most represented sector of activity with 85.54%. All the respondents knew the definition of pain. The different types of pains were known by 45.78% of respondents. The most used pain scales were visual analog scale (VAS) and verbal descriptor scale (VDS) respectively in 53.01 % and 12.05 % of cases. Tramadol and paracetamol were the mostly used analgesics respectively in 98.80 % and 97.59%. Intravenous morphine titration was known to 67.47% of the respondents. Only 18.07% of the respondents benefited from a training on the management of pain. *Conclusion:* The knowledge and attitudes of anesthetists on pain deserve to be updated through theoretical and practical training to improve the management of pain in our hospitals.

Keywords: Knowledge, Attitudes, Pain, Niamey.

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INTRODUCTION

Within the sensory systems, pain is an alarm signal that protects the body: it triggers reactions which purpose is reducing its cause and limit its consequences. Pain is a very common and complex phenomenon. Very common in so far as it is an experience that we all have to live. Very complex because it manifests itself in a heterogeneous way and obeys multiple and variable determinants according to the individual. Pain is defined by the international association for the study of pain (IASP) as « an unpleasant sensory and emotional experience related to actual or potential tissue damage or described in terms of such damage ». Its management is a priority and there is a huge therapeutic arsenal for the treatment of pain. The aim of our work is to assess

the knowledge and attitudes of anesthesia staff on pain in Niamey hospitals. [1, 2].

PATIENTS AND METHOD

This was a multicenter descriptive cross-sectional study carried out in five hospitals in Niamey (Republic of Niger) from July 3rd to December 3rd, 2021. Were included in the study, all the anesthesia staff who agreed to answer the questionnaire. The variables studied were: age, gender, seniority, sector of activity and qualification, definition of pain, different types of pain, the impact of pain on the body, tools used for assessment of pain, difference between acute and chronic pain, knowledge about analgesics, the practical attitudes of pain management. The data were entered

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and processed with Epi info 7.2 software and the Microsoft Office 2019 pack.

RESULTS

Our study concerned 106 agents from the anesthesia and resuscitation department of the hospitals that served as our study framework. There is a female predominance of 55.42% with a sex ratio of 0.80. The age group of 45- 54 years was the most represented with 40.07% of cases. The average age of respondents was 44.95 ± 8.9 years. Anesthesia nurses were the most represented with 90.36% (Figure 1). The respondents were at least 5years experienced in 34.94% of cases. The operating theatre was the most represented sector of activity with 85.54% (Table I). All the respondents knew the definition of pain. The most cited types of pain were acute pain and chronic pain in 54.22%; the different types of pains were known by 45.78% of respondents (Table II).

Only 44.58% of respondents claimed to know the pain intensity levels. According to 24.10% of respondents, pain could have an impact on the body. Anxiety was the most cited impact by our respondents in 25% of cases. For 50.60% of respondents, the

duration of postoperative pain was 48 hours. Most of our respondents, 84.34% said they did not know the difference between acute pain and chronic pain. For 97.59% of respondents, analgesics are classified into three (03) levels according to the WHO. According to 61.45% of them, morphin was used in the service protocol. Only 67.47% of respondents said they had heard of morphine titration. The main side effects of morphin cited by respondents were respiratory distress and nausea with respectively 40.96% and 28.92% of cases (Table III). All respondents affirmed that the antidote to morphin was naloxone. Nearly 51.81% of respondents said they systematically assess pain. The most used evaluation scales were VAS and VDS in respectively 67.44% and 20.93% of cases. Tramadol and paracetamol were the most used analgesics by respondents in 98.80% and 97.59% of cases respectively (Table IV). According to 85.54% of respondents, analgesia was started in the operating room 30min before the end of the surgery. Only 18.07% of respondents had received training on the management of pain in our study. 83.13% of respondents were satisfied with the management of pain in their departments.

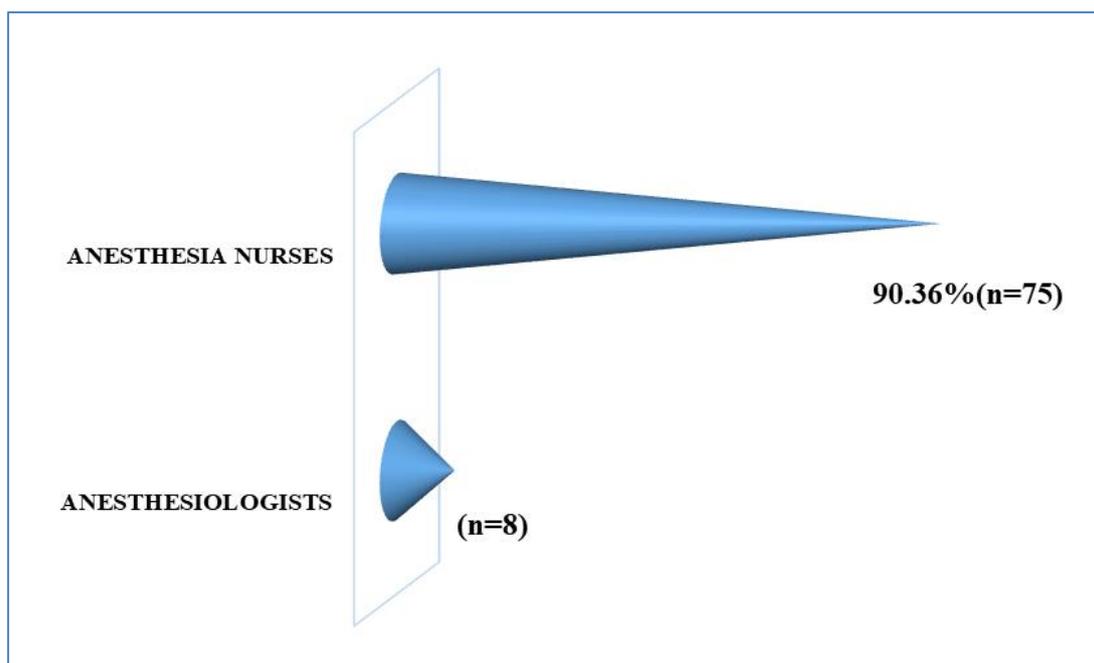


Figure 1: Distribution of agents by qualification

Table I: Distribution of respondents by their activities field

Field of activities	Number	Percentage (%)
Operating theatre	71	85,54
Resuscitation unit	18	21,69
Emergencies	18	21,69

Table II: Distribution of respondents by their knowledge on different types of pain

Different types of pain	Number	Percentage (%)
Accute	45	54,22
Chronic	45	54,22
Neurogen	15	18,07
Psychogen	11	13,25
Nociceptive	13	15,66
“Don’t know”	38	45,78

Table III: distribution of respondents by their knowledge on morphine side effects

Side effects	Number	Percentage (%)
Respiratory distress	34	40,96
Nausea	24	28,92
Vomiting	12	14,46
Itching	9	10,84
Drowsiness	8	9,64
Urinary retention	6	7,23
Dizziness	5	6,02
Constipation	3	3,61
Bradycardia	2	2,41
Dysuria	2	2,41
Dependance	1	1,20
Confusion	1	1,20

Table IV: Distribution of respondents by analgesics they usually use

Analgesics	Number	Percentage (%)
Tramadol	82	98,80
Paracetamol	81	97,59
Ketamine	31	37,35
Morphine	31	37,35
Nefopam	29	34,94
Paracetamol codeine	7	8,43
Diclofenac	2	2,40

DISCUSSION

Our study targeted all the anesthesia and resuscitation staff of the hospitals that served as our study framework, (106 agents). Only 96 of them participated in the study (participation rate of 90.56%). There was a female predominance of 55.42% with a sex ratio of 0.80. The average age of respondents was 44.95years with extremes of 27 and 59 years. Our average age is higher than which of Dramane A in Mali who found an average age of 32.88 years [3]. This difference could be explained by the fact that we did not include students, residents and trainees of anesthesia and resuscitation in our study. Anesthetist nurses were the most represented with 90.36%. In our study, 34.94% of respondents were at least 5 years of experience. Kabore R.A.F and al. in Burkina Faso found 83.7% of respondents with no experience [4]. Only 51.81% of respondents said they systematically assessed pain, and the most commonly used evaluation scales were VDS and VAS in 67.44% and 20.93% of cases respectively. Beye S A and al. in Senegal, found VDS to be the most widely used evaluation scale followed by VAS in respectively 46.68% and 14.2% of cases [5]. According to Chaibou MS and al. in Niger, the most used scale

was the VDS followed by the VAS in respectively 60.12% and 36.81% of cases [6]. For 97.59% of respondents, analgesics are classified into three (3) levels according to the WHO.

Tramadol and paracetamol were the mostly used analgesics by our respondents, in 98.80% and 97.59% of cases respectively. Beye S A and al. reported NSAID and paracetamol as the most used analgesics in 70.5% and 92.2% respectively [5]. In our study, 85.54% of respondents said they started analgesia in the operating room 30min before the end of the surgery. Beye S A and al., Langlade and al. in France, reported that analgesia was performed in the recovery room in 48.3% and 90% of cases respectively [5- 7]. The treatment of pain must be as early as possible and taking into account the pharmacokinetic data of each molecule, it is recommended to administer non-morphine analgesics with anticipation, at the end of the surgery or before the lifting of the motor block in regional anesthesia is done [8].

For 50.60% of respondents, the duration of postoperative pain was 48 hours. Postoperative pain is a painful sensation related to tissue damage created

during surgery and which occurs at the end of the operation. The intensity of this pain depends on the surgical procedure and varies according to the sensitivity of the patient [9, 10]. Postoperative pain is common, scarring creates an inflammatory-like pain with hyperalgesia involvement, lasting for an average duration of 5 to 7 days [11].

Only 18.07% of the respondents benefited from a training on pain management. In the study by Diango D and al. in Mali, 36% of practitioners had received specific training in pain management [12]. In our study, 83.14% of respondents were satisfied with pain management in their services. Our result is similar to which of Bertrand P and al. in France, who reported that 82% of caregivers affirmed that the patient's pain was well managed in their services [13].

CONCLUSION

Our study shows that pain remains little known in our hospitals. It is undervalued and morphine remains underused. The knowledge and attitudes of anesthesiologists on pain deserve to be updated through theoretical and practical training in order to allow a better pain management in our hospitals.

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Cite this article: Nanzir Sanoussi M, Gagara M, Nzouamin C, Daddy H, Chaibou M. S (2023). Knowledge and Attitudes of Anesthesia Staff on Pain in the Hospitals of Niamey. *EAS J Anesthesiol Crit Care*, 5(6), 104-107.
