

## Use of Morphine for Palliative Care based on their prescription

Dorina Dervishi<sup>1\*</sup>, Emi Panariti<sup>2</sup>

<sup>1</sup>European University of Tirana, Faculty of Technical Medical Sciences, Tirana, Albania

<sup>2</sup>Albanian University, Faculty of Medical Sciences, Tirana, Albania

\*[dorina.dervishi@uet.edu.al](mailto:dorina.dervishi@uet.edu.al) Email of the corresponding author

**Abstract-** Morphine is an opioid that it is used as sedative analgesics or pain reliever. Different form-doses are only legally available with medical prescription. Morphine is the strongest naturally occurring drug, used for post-surgical pain and extreme pain like cancer pain.

The aim of this study is to analyze the quantity of morphine used in different form-doses for palliative care in Albania during the years 2018-2022

The study is based on the reimbursement data for different form-doses of morphine used in the period 2018-2022 in Albania from Compulsory Health Care Insurance Fund (FSDKSH).

From the data resulted that during the last year 2021-2022 the quantity of morphine used in Albania with medical prescription for terminal patient is increased where the most commonly form-doses used are morphine hydrochloride solution for injection 10mg/ml and morphine sulphate prolonged release capsules 60mg.

During the years 2019-2022 morphine sulphate prolonged release capsules 100mg and 10mg are no longer used as a result of the introduction of morphine sulphate oral solution 20mg/ml and morphine hydrochloride trihydrate tablets 10mg in the 2019 reimbursement scheme for pain treatment of terminal patients. Involved in the scheme of pain treatment of other opioid derivatives and their combinations with non-opioid could significantly improve their side effects and the quality of their life.

*Key Words: Morphine, Palliative Care, Opioids, Pain, Treatment*

### I. INTRODUCTION

Morphine is an opioid that it is used as sedative analgesics or pain reliever and remains still a standard with which new analgesics are measured [1]. Opium, extracted from *Papaver somniferum* is the main source not only of morphine but also other alkaloid compounds such as codeine and papaverine. Other semisynthetic derivatives of morphine are hydromorphone, oxymorphone etc. Morphine was isolated in 1806 from Frederic

Sertürner, a pharmacist who tested pure drug on himself and three young men. He observed that morphine caused cerebral depression and relieved toothache. Morphine is the strongest naturally occurring drug, used for post-surgical pain and extreme pain like cancer pain [1,2]. Clinical situations that benefit significantly by medicating with morphine include management of palliative/end-of-life care. Morphine can be administrated through different routes such as

orally, in formulation available in both immediate and extended- release, intravenously, sublingually, The different form-doses are only legally available with medical prescription [2-6].

The aim of this study is to analyze the use of different form- doses of morphine based on the

## II. MATERIAL AND METHODS

The study is based on the collection of the reimbursement data (under medical prescription) for different form-doses of morphine used in the

## III. RESULTS AND DISCUSSION

Based on the data collected, the calculated quantity (kg) of morphine used in Albania with medical

epidural, and intrathecal.

quantity calculated from the reimbursement data collected from FSDKSH for palliative care in Albania during the years 2018-2022.

period 2018-2022 in Albania from Compulsory Health Care Insurance Fund (FSDKSH) [7]. From these data collected, was calculated the total amount of different form-doses of morphine expressed in kg.

prescription for terminal patients during the years 2018-2020 is decreased but during the last year 2021-2022 it is increased as showed at Figure 1.

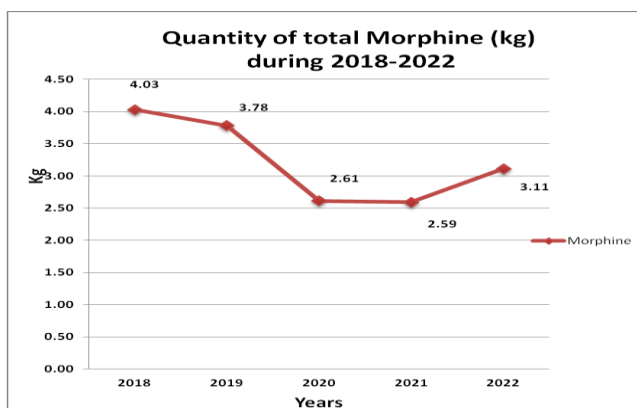


Figure 1. The quantity of total morphine (kg) for terminal patients from 2018 to 2022

The most commonly form-doses used during the years 2018-2022 are morphine hydrochloride solution for injection 10mg/ml (x1ml) and morphine sulphate prolonged release capsules 60mg as showed in Figure 2. In 2018 morphine sulphate prolonged release capsules of 10mg was still in use. During the years 2019-2022 morphine

sulphate prolonged release capsules 100mg and 10mg are no longer used. From 2019 morphine sulphate oral solution 20mg/ml and morphine hydrochloride trihydrate tablets 10mg was included in the reimbursement scheme for pain treatment of terminal patients.

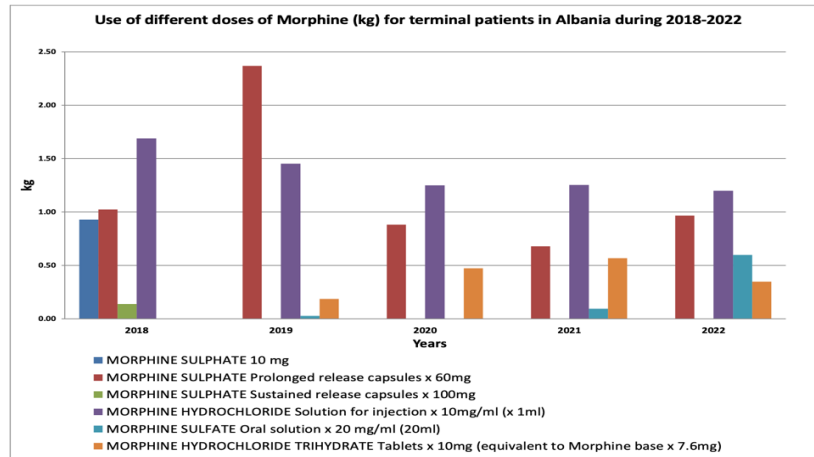


Figure.2 The quantity (kg) of form-doses of morphine for terminal patients during from 2018 to 2022.

The annual average amount calculated of morphine for five years as showed in Figure 3, was higher for morphine hydrochloride solution for injection x 10 mg/ml (x 1ml) in

Albania while for morphine sulphate prolonged release capsules 100mg is lower since it is no longer use.

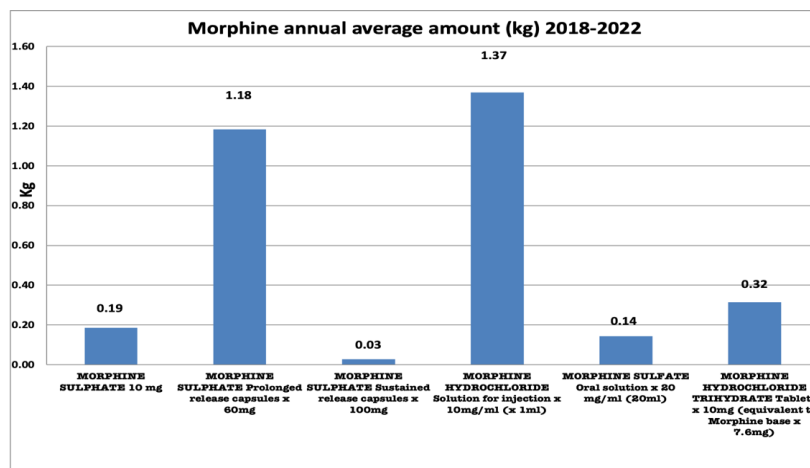


Figure.3 The average amount of morphine used by patients in 2018-2022

Other derivatives which need a medical prescription for during 2018-2022 were also used for the palliative purpose such as Codeine, Fentanyl, Tramadol, Oxycodone [7], but the data was not analyzed.

#### IV. CONCLUSIONS

During the years 2019-2022 morphine sulphate prolonged release capsules 100mg and 10mg are

no longer used as a result of the introduction of morphine sulphate oral solution 20mg/ml and morphine hydrochloride trihydrate tablets 10mg in the 2019 reimbursement scheme for pain treatment of terminal patients. Involved in the scheme of pain treatment of other opioid derivatives and their combinations with non-opioid could significantly improve their side effects and the quality of their life.

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