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Nightmares (Bangungut) is the Leading Cause of Sudden Unexplained Nocturnal Death among Adults (SUNDS), its Risk Factors, and Solution. A Review of Literature

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Abstract- Background: Nightmare(NM) and its various names is a well known phenomena In different societies. The synonyms (Bangungut) in Philippine is colloquially and culturally used to describe this phenomenon (NM). This enigma is called Sudden Unexplained Nocturnal Death Among Adults (SUNDS) in USA, (pok kuri) in Japan, in Arab countries its name is gutham or khapoo. There is a strong link between Bangungut (NM) and SUNDS, but SUNDS scientifically as a medical term does not mean nightmare or Bangungut .This paper focused on the enigma of Nightmare, and explores the risk factors which triggers NM (Bangungut) which might lead to death (SUNDS).

Objectives:

1. To clarify (explain), the exact meaning of: Nightmare, Bangungut, SUNDS.
2. To determine the risk factors of NM (Bangungut), which might lead to death (SUNDS).
3. To explain the death mechanism of nightmare (Bangungot).
4. To postulate the mechanism, and criteria for diagnosis of NM (Bangungut).

Keywords: *nightmare, bangungut, SUNDS, heavy meal. right - side sleeping position, sleep (limb) paralysis, asphyxia. near-miss SUNDS, vagal stimulation, ALTE, SIDS.*

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Methods: The author summarized what is known about Nightmare (Bangungut) i.e. the autopsy findings, the clinical pictures, the mechanism, included in the previous studies and researches in medical journals. The researches were gained randomly according to their availability or after searching data base in website.etc., classified according to the aim of the study, and put in simple tables for comparison.

Results: The review reveals confusing in concern with the term (SUNDS).This study exposed the risk factors, the mechanism, and the solutions as they proposed by the investigators and author for solution. Surprisingly the sleep position have not caught the attention of medical researchers as a main risk factor for this disorder.

Conclusion: The study proposed the elements for definition and the diagnostic features (criteria) for nightmares, the risk factors and the mechanism have mentioned too. Nightmare, Bangungut are the same phenomenon. The term SUNDS is not a true synonym for NM, but it is the fatal end of Some Nightmare cases.

Keywords: *nightmare, bangungut, SUNDS, heavy meal. right - side sleeping position, sleep (limb) paralysis,*

asphyxia. near-miss SUNDS, vagal stimulation, ALTE, SIDS.

Abbreviations: SUNDS: Sudden Unexplained Nocturnal Death among Adults.

I. INTRODUCTION

a) *Nightmare and its various names is a well known phenomena*

In different societies. Later on, this enigma is called SUNDS in USA in 1970, by centers for disease control (CDC), (Bangungut) in Philippine, (pok kuri) in Japan. in arab countries this phenomenon is called gutham or khapooos. Not all synonyms, given to this enigma indicated (colloquially) or literally the same meaning for NM or Bangungut, as for example SUNDS. Bangungut, is the term originated from the Tagalog word Bangungut: Bangun: to rise, ungul: to moan. which is the same meaning for nightmare. Traditionally this disorder is well known to lay people in the world, each society has its own colloquial term, but Nightmare is the common and the dominant term. Folklore of causation about bangungut exists among the popular with different stories. That means the sleeper might still a live (survive) after suffering this condition.

The victim appears to be subjected to violent, terrifying dreams from which the sleeper might be awakened or might lead to death(SUNDS), It is happened every where in the world .This enigma (disorder), was firstly recognized in manila in 1915 and was described and published in medical publication two years later⁹.

Because of the documentation and the advancement in the field of pathology, the existing researches have focused on autopsy findings seeking an explanation for nightmare. The pathologists had autopsied the cases for diagnosis the cause of death but with no result. The author believed that There might be a reasonable translation- by CDC- for this term: NM, or Bangungut to be changed to SUNDS, because SUNDS is an other term with different meaning, and this was the starting point of confusion. SUNDS includes a dead case of NM, while NM or bangungut still alive (survive). Clearly, there is a strong link between

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nightmare and SUNDS. But SUNDS is the fatal end of NM.

The annual incidence of SUNDS has been reported to be as high as 43 per 100,000 people aged 20–40 years in the Philippines and 38 per 100,000 people aged 20–49 years in Thailand. In Southern China, the incidence is about 1 per 100,000 people. During 1981-1982 the annual rate in the U.S was remarkably high: 92/100,000 among Laotian-, 82/100,000 among other Laotian ethnic group and 59/100,000 among Cambodians.¹²

II. HISTORICAL BACKGROUND

a) *What is known about NM, Bangungut, SUNDS?*

The term Bangungut originated from the Tagalog word meaning "to rise and moan in sleep".^{4,9,15} It is also the Tagalog word for nightmare.

The word "nightmare" derives from the Old English "mare", a mythological demon or goblin who torments others with frightening dreams. Or referred to a mare a female spirit that was believed to suffocate the sleeping victim. Subsequently, the prefix "night-" was added to stress the dream-aspect. The phenomenon of nightmare (Bangungut) was described in piles of literature in different societies for a long time. Nightmare is present since the creation of human being and their living on the earth surface. Nightmare is a part of traditions to all humankind. It is totally wrong and unlogic to restrict Nightmare to some societies only. NM is happening to some individuals every where in the world. The influential Greek physician Galen examined the causation of the nightmares during the second century AD, and a description of the experience appears in a Chinese book on dreams dated to as early as 400 BC. Descriptions of the "nightmare", however, only appear in English in the later medieval period. One fourteenth-century manuscript describes, for example, how the "night-mare" lay on top of people at night (Kuhn and Reidy, 1975).

b) *Definition*

By reviewing a number of references and researches the following definitions were included. Nightmares refer to a terrifying terror to some individual in all ages, after having eaten a heavy meal and falling sleep

III. CLINICAL MANIFESTATION

Aponte stated: The clinical manifestation are remarkably constant and are repeated time and time again. The subject, healthy, young, goes to bed, after having eaten a heavy meals. After he has fallen asleep he is seen to move about in bed in most agitated manner, groaning, yelling and coughing often with frothy fluid exuding from mouth. Attempts to awaken him are unsuccessful, and dies within very short time sometimes he is found dead in bed the following morning⁹.

a) *Autopsy findings*

Aponte stated the pathologic changes were not specific and in general were those of acute circulatory collapse. The pathologists found : cyanosis of lips, congestion of internal organs, Petechial hemorrhages,- acute cardiac dilatation. pulmonary edema acute pancreatitis, Cerebral edema, The stomach is distended and filled with ingested food⁹.

b) *Theories*

Numerous of theories, have been proposed to explain the cause and mechanism of death. The "eating-before-sleeping" theory, the cardiac theory, the toxic theory, and the acute pancreatitis theory. heredity, nutrition, toxins, chemical, pollution, last is the brugada disease.

c) *What is unknown about Bangungut (NM) and SUNDS?*

Despite the huge number of researches studying this enigma, the researchers did not determine the risk factors mainly Non Right-side sleeping position. Mechanism of death were absent from their discussions too. That is why they failed to propose the mechanism and to give the solution.

d) *Objectives*

1. To clarify (explain), the exact meaning of Nightmare, Bangungut, SUNDS, as it is included in articles, references, traditions.
2. To determine the risk factors for NM (Bangungut), which might lead to death (SUNDS).
3. To explain the mechanism of death, in this disorder.
4. To postulate the mechanism, and criteria for diagnosis of NM.

IV. MATERIAL AND METHODS

The author summarized what is known about Nightmare (Bangungut), SUNDS, including : the autopsy findings, the clinical pictures, included in the previous studies. The researches were gained randomly according to their availability or after searching data base in website. the clinical data and autopsy findings on victims, were categorized and tabulated with in a simple tables for comparison. This study is providing a rich comparison of risk factors, clinical pictures and autopsy findings which were absent from all previous studies.

V. RESULTS

Table I : shows the risk factors and clinical manifestations (features) in sufferers from Nightmare (Bangungut).

RISK FACTORS and CLINICAL MANIFESTATIONS					
Sudden unexplained nocturnal death among adults(SUNDS)	Near-miss SUNDS	Night mare(Bangungut)	Age	adult	a
			condition	Healthy	b
			eating food before sleep	heavy meal	c
			sleeping position	non Right-side sleeping position	d
			asphyxia	occurs	e
			Sleep (limb) paralysis	occurs	f
			terrifying dreams of NM	occurs	g
			Groaning Moaning	occurs	h
			death during sleep	escape death survive)(i
			death during sleep	Occurs	j
			autopsy findings	signs of asphyxia	k

NM= a-h

Near-miss SUNDS=a-i

SUNDS=a-k(except) i

Nightmare=Bangungut=Pok kuri=Ghutham(Khapoos).

Near-miss SUNDS: Those who suffered NM, but escaping death (Survive).

SUNDS= nightmare sufferers ending with death (NM dead cases).

The main clinical manifestation (features) which constitutes Bangungut or Nightmare are: suffocation. Terrifying dreams, limb paralysis.

Table II : shows autopsy findings in SUNDS (nightmare dead cases).

Phenomenon	Autopsy findings			
	Petechial Hemorrhages (ITH)	Pulmonary edema. congestion of organs	Food in stomach	Food, frothy fluid in air passages
SUNDS	Found	Found	Found	Found

Table (II) presents the autopsy findings for SUNDS. The forensic pathologists found the following: Intrathoracic hemorrhages (I.T.H), pulmonary edema, food in stomach, frothy fluid exudes from the mouth, nothing more.

Table III : Shows similarities between SUNDS and SIDS.

Disorder	Age	Sleep position	Eating Food	Death	Obstruct. Asphyxia	Autopsy findings
SIDS	Infant, child	Non Right side	Having Food	occurs	Suffers	Signs of asphyxia
SUNDS	adult	Non Right side	Heavy meal	occurs	suffers	Signs of asphyxia

Table III shows that the risk factors and clinical manifestations are the same. The intensity of manifestations may differ according to the age.

VI. DISCUSSION

The author discovered that the existing data in the previous studies are conflicting.

To put research concerned with NM-Bangungut. Into perspective, it is essential to know the nature of the problem in order to solve it. Here there were no obvious clues for researchers to deal with. The enigma of NM (Bangungut) or SUNDS has frustrated researchers for too long. The researchers have not delineate the differences between NM and SUNDS.

The scientists failed to determine its causes and mechanism because of the, misconception and confusion of the term NM, SUNDS.

The results is consistent with previous studies of the author¹⁴, these results suggested that Right- side position sleeper are in a different physiological state which does not resemble other positions(prone, supine, left side sleeping position).The persons who slept on Right-side posture were not have been reported to experience NM or SUNDS. Results of autopsies have not identified a cause of death since the first autopsy. By this study the author found the following points: Clinical manifestations are remarkably constant since the first description of Aponte⁹ and Majoska²⁰.

Pathological changes are the same since the first autopsy. There is confusing in considering SUNDS and Nightmare (Bangungut) as the same meaning, as the CDC declared and applied this name. The major finding of our study is the other risk factor: sleep position (Non Right-side), which was totally absent in all previous discussion.

No any study before mentioned the Non Right-side sleeping position as a risk factors, and the Right-side sleeping position as a safe position, while there was a consensus about the heavy meal as a risk factors. Aponte, is the pathologist who described and discussed all points, which the scientists up-to-date repeat the same basic information of APONTE there are many other individuals who suffered from such enigma (Bangungot) but succeeded to escape and to survive, by intervening or by auto-arousal luck and chance.

a) Synonyms

Bangungut (NM) is not equated to the Sudden Unexplained Death Syndrome (SUNDS), which is (SUNDS) characterized as the abrupt death of an otherwise healthy person, for no apparent reason or explanation (Gervacio-Domingo, et al., 2007)².

The term SUNDS itself developed through an attempt to provide a name- by CDC- for this clinical disorder (enigma) without basing on its original sense. unfortunately the application of the term SUNDS has been increasingly confusing when we utilize it as a synonym of NM or Bangungut, or when we deal with it as an other enigma. In fact the term SUNDS generates dissent among researchers and led to confusion and misinterpretation to all investigators.

The term SUNDS, was far away from its original sense (bangungut), nightmare). How could the researchers call this enigma Bangungut(NM) and SUNDS in the same time.? How could they equate between them?.

SUNDS is not – literally or scientifically- a term or a synonym (identical) for Bangungut or Nightmare as CDC declared. In daily colloquial use , bangungut often refers to nightmares in general , and do not necessarily end fatally.

b) Definition

The term “bangungot” is not an unfamiliar term to Filipinos. It is colloquially and culturally used to describe the combination of nightmares and immobility during sleep (Tan, 2000)¹.

By reviewing a number of references and researches the following definitions were included. Nightmare refer to a terrifying terror to some individual in all ages, after having eaten a heavy meal and falling sleep, other scientists added the following points to the previous definition as follows: usually characterized by a feeling of suffocation and helpless¹⁶. paralysis.

The classical one associated with helpless paralysis, and happens in later half of sleep¹⁸

- Is a fright reaction during sleep. The child awakens in terror from a dream usually characterized by a feeling of suffocation and helpless¹⁶.
- It is a dream in which the sleeper feels that something is kneeling on his chest. Kolb stated : nightmares occur physiologically during REM sleep and during later part of the sleep period¹⁷.
- The sufferer cannot move, talk, or shout, even through trying to do so. Partially awake and also partially somnolent, he attracts attentions to himself by moaning. Some try to break the paralytic attack by forcing a leg or arm off the bed but they could not. A touch generally leads to arousal. It is clear that it could happen to all ages.

So, on the ground of this study and previous definitions, the author would emphasized that the NM definition must have five elements (criteria) to be valid and diagnostic. two of these elements are the primary risk factors which are:1- eating a heavy meal. 2- lying on non Rt side position (prone, supine, left side position) which trigger nightmare (Bangungut). The other elements for the definition are the main clinical characteristics of the sleeper during suffering from NM, These are:1- Nightmares terrifying dreams(2)- The sleeper must suffer from sleep(Limb) paralysis.(3)- Suffering of Suffocation or asphyxia. All these support (diagnose) that the sleeper was having Nightmare or Bangungut. Kavanau (2000) suggests that the frightening images that one sees during a bad dream are caused by post-traumatic stress related events⁷.,but this is not concordant with current NM concept. Post-traumatic stress disease has no any relations to NM at all.

Night mare is a condition results from a respiratory failure and suffocation results from a combination of the main two risk factors: eating heavy meal and lying on non Right-side sleeping position (prone, or back or left side), it reflects the state the sufferer reached the climax and his difficult situation in a terrifying dream, as a result of obstructive asphyxia and respiratory failure.

Its main feature is suffocation (asphyxia), and limb (body) paralysis associated with non-logic, fragmentary pictures, which are the responses to your stage of suffocation, before you either wakeup or died.

c) *Clinical Manifestations*

Clinical picture invariably follows a well defined pattern, mostly in all studies.

Aponte stated: The clinical manifestation are constant and repeated time and time again. The subject, healthy, young, goes to bed, after having eaten a heavy meals. After he has fallen asleep he is seen to move about in bed in most agitated manner, groaning, yelling and coughing often with frothy fluid exuding from mouth. Attempts to awaken him are unsuccessful, and dies within very short time sometimes he is found dead in bed the following morning. Witnesses were alerted or awakened by abnormal respiratory sounds and /or by a brief groan, gurgling tonic rigidity. Witnesses interpreting the terminal groans in death as sign of terror supported the popular notion that deaths resulted from terrifying dreams. The sleeper is suffering an experience from nightmare in the form of limb paralysis, Difficult yelling, moving due to suffocation.

There is a consensus in all previous and contemporary researches that heavy meal is a risk factor. Terrifying dreams, moaning or groaning, sleep (limb) paralysis, suffocation, conscious but not awake, paralyzed respiration. etc. The author emphasized that sleep paralysis is a feature of Night mare not a separate enigma or phenomenon as some scientists and psychiatrists stated.

Terrillon, et al. (2001) found that sleep paralysis involved out of body experiences 6 most of the investigators consider sleep paralysis as a separate phenomenon not a part of NM. This is misinterpretation, and misunderstanding of the elements, criteria for Nightmare

d) *Autopsy Findings-Pathological Changes*

The earliest investigations were based on the performance of an autopsy upon the bodies. One of the earliest investigation based on autopsies was that by Majoska²⁰ and Aponte⁹. After that most- if not all – information of the existing researches and contemporary studies were extracted from the study of Aponte. Aponte stated: the pathologic changes Were not specifics and in general were those of acute circulatory collapse. the pathologists found : cyanosis of lips, congestion of internal organs, Petechial hemorrhages,- acute cardiac dilatation. pulmonary edema acute pancreatitis, Cerebral edema, The stomach is distended and filled with ingested food.

In concern with pathological changes, all autopsy findings which had been documented for about century are still the same and no thing new Surprising

that all findings for infants are the same(SIDS) except acute pancreatitis.

e) *Near-Miss SUNDS*

It is well-known that some of the nightmare cases which is going to die. But while they were suffering from the process of dying, it may be prevented either by external factor (mechanical interference (touch), I can not find an explanation, but it is God's care for this auto- arousal and may escaping death and survived, they called near-miss SUNDS. Dr Otto, and others mentioned the term near-miss SUNDS after reported three cases of near-miss SUNDS¹³.

The process of death in Nightmare (SUNDS) or escaping death (near-miss SUNDS)

Adult: Non right- side sleeping position +heavy meal clinical features (nightmare terror dream, sleep paralysis represent asphyxia or dying process) stopped by a timely mechanical intervening (touch) escaping death (near-miss SUNDS or survival Nightmare case).

The same Adult: Non right- side sleeping position +heavy meal clinical features (nightmare terror dream, sleep (limb) paralysis represent asphyxia or dying process) no timely mechanical intervening (no touch) death occurs (SUNDS).

f) *Sleeping Position*

Narrated Al-Bara' ibn 'Azib (may Allah be pleased with him), the prophet Mohamed (Allah's Peace Be Upon Him "PBUH") said to me, "Whenever you go to bed perform ablution like that for the prayer , lie on your Right-side and then say, 'O Allah, I surrender my soul to You and I turn my face to You and I entrust my affair to You and I seek Your support with hope and fear of You. There is no refuge from You but to You. I have believed in Your Book (the Qur'an) which You sent down and in Your Prophet Whom You sent. Then if you die on that very night you will die with faith (i.e in the religion of islam). Let the aforesaid be your last utterance (before sleep).

(Al-Bukhari: 814)15

Tradition, religious, and social circumstances usually dictate which sleep position is selected by the individual?. For both adults and infants there is a position preferred for different societies. That is why prone position was the preferred sleep position for infants in USA which led to a huge number of deaths among infants before changing to back position, and also it is a preferred sleeping position in USA for adults.

The author asked the researchers all over the world : What about the nearly forgotten Sleep position in the matter of NM(Bangungut)?.

There has been no research and discussion in regard to sleep position as a main risk factor in this enigma (NM). The sleeping position did not receive the attention of researchers at all through all their studies. In

the way, no studies are known to have examined the Right-side sleeping position.

Recent German research confirms that both sleep paralysis and related hallucinations predominantly occur in a supine sleeping position (Dahmen and Kasten, 2001).

No one thought about the association between NM (Bangungut) and the Non Right-side sleeping positions. And no advice was recommended for the safe position. The prone / supine sleeping positions have been found to be associated with an increasing of airflow resistance, lowering the arousal threshold and the possibility of mechanical occlusion of the upper respiratory passage.

A link between NM and SUNDS has been noted in much of the literature, but due to misinterpretation of the nature of this disorder the scientists considered them as two separate entities. That is why they failed to answer.

g) Risk Factors

There is consensus that heavy meal is a risk factor and this study added other major risk factors the sleep positions (prone, supine or left side) are associated with SUNDS.

The study identified two essential risk factors for NM (Bangungut) or SUNDS. The risk of NM and SUNDS is high when individual sleep on their non-Right-side sleeping position.

There is a causal link established between NM – SUNDS (NM deaths).

A challenging question was put by scientists stated: who could identify the trigger for NM which results in instantaneous death?. The data to answer this question (Risk factors) is available. The risk factors for NM are; -1 - heavy meal. Eating a heavy meal and falling asleep is one of the main risk factors for NM. A hungry person never suffer from NM whatever his sleeping position.

2) The second risk factor is: sleep position (Non Right-side sleeping position). The author concluded in his research¹⁴. That sleeping on non Right-side position is an other risk factor for NM. Both risk factors must be together in order might to playing a role as triggers and, a potential stimulus for nightmare¹⁴.

h) Mechanism

The mechanism of death in Nightmares (Bangungut), SUNDS was unknown. some studies have suggested a role for suffocation (asphyxia) associated with supine sleeping position due to failure of respiratory control mechanism. death may occur if this mechanism continues to reach a climax point, then either death or escaping death and survive.

The author concluded that, there is only a single mechanism for NM and SUNDS. According to over distension of the stomach by recently ingested food and due to pressure upward upon the diaphragm, this

interferes with cardiac and pulmonary function, both directly and through a vagal reflex mechanism.

Suffering from respiratory paralysis and limb (body) paralysis suggested that death is due to NM. During sleeping intercostalis muscle do not substantially contribute to inspiratory effort and the pharyngeal dilator are less effective as a result the obstruction hypoxia often worsen more in sleeping. Generally the other factors which contribute to nightmares death are:

=Obstruction of the upper airway-by the back of the large and muscular tongue falling posteriorly into the hollow of a soft yielding pharynx -in sleep- may obstruct the airway and even worsen as the persons inspires, thus enhancing negative pressure below the block. this led to stuck of tongue.

=Negative esophageal pressure is higher in supine / prone positions.

=It is well known that hypoxia, stimulates the vagal inhibition.

i) Theories

Clearly, there is a wide range of opinions in how to determine what is SUNDS, NM and their nature.

Researchers have focused on finding an explanation for Nightmare (Bangungut), SUNDS, but they failed. During review of studies Numerous of theories, hypotheses, have been proposed to explain the cause and mechanism of death due to NM. Nolasco (1957) proposes four theories on the causes of bangungot: The "eating-before-sleeping" theory, the cardiac theory, the toxic theory, and the acute pancreatitis theory³.

In general the proposed theories included in: heredity, nutrition, toxins, chemical, pollution. There was an objection against the theory of acute pancreatitis as a trigger mechanism because it does not explain this sequence of events.

Gaw, et al. (2011) suggested that SUNDS is identical to the Brugada syndrome- An allelic disease that ends in sudden cardiac death. Carandag (2006) believes otherwise⁸. All previous theories were forwarded with no success. Because they were unconvincing, unlogic or unsatisfactory, they have been criticized and finally discarded.

One of the researchers stated: It would be unwise, therefore, to draw any conclusions about the relationship between Brugada and the nightmare. # cardiac etiology with or without avitaminosis was unconvincing theory. In fact the theory of eating before sleeping constitutes half theory (one risk factor). The other half is the sleeping position.

VII. CONCLUSION

The conclusion that the author drew from this revision on Nightmare (Bangungut) are the following:

1. The study supported the previous research of the author which determined the heavy meal and

1. sleeping on non Right-side position as triggers for NM.¹⁴.
2. The main clinical manifestation which constitutes the diagnosing features of nightmare (Bangungut)-criteria- were: a- asphyxia (suffocation).b- sleep paralysis (limb paralysis).c-terrifying dreams of nightmare.
3. The two risk factors: heavy meal and non Right side sleeping position might lead the individual to suffer from Nightmare. The three cardinal clinical manifestation which indicated this suffering are: suffocation (asphyxia), NM terrifying dream and sleep (limb) paralysis. These symptoms must be found all together for diagnosing NM.
4. These risk factors may lead to NM, but not all those having these risk factors must suffer from NM. and without these two risk factors the nightmare would not occur.
5. Nightmare does not necessarily end fatally.
6. For those who were suffering from nightmare and ending with death we can apply the CDC term (SUNDS)
7. If those who were suffering from nightmare escaping from death (survive) we call them near-miss SUNDS¹³.
8. Sleep paralysis constitutes one of the main three clinical symptoms for diagnosing NM.
9. You have to differentiate between nightmare dream (terrifying dream) and other night terror or night frightening. As night frightening (night terror) may occur in any position including Right-side position, in a hungry individual and in a full stomach but it must not have limb paralysis and might or might not wake up (an arousal). Its dream components is logic, it may occur throughout sleep, while nightmare terror is not logic and fragmented pictures and it occurs in 1-3 hours after sleep.
10. Nightmare never takes place on Right-side sleeping position, or in those with empty stomach (hungery).
11. Nightmare happens to all ages but every age has its expressions and reflections.
12. Near- miss SUNDS in adults is equated to ALTE in infants, and SUNDS among adults is equated to SIDS in infants, the difference only is the age and they have nearly the same mechanism.
13. Nightmare (Bangungut) is a universal (for all). There is no relation between NM and any other previous theories or diseases mentioned by pathologists or researchers throughout the history of studying this enigma. for example : Buguda syndrome, acute pancreatitis. Simply, because when you said : I caught the disease as a cause of death you must drop the meaning of NM immediately. NM is mechanical and positional death.
14. With no doubt, there is strong link between NM and SUNDS because SUNDS is the NM cases ended with death. But SUNDS is not a synonym of NM, or

15. Right-side sleeping position and light meal will protect an individual from NM 100%.as it is a safe sleeping position
16. Post-traumatic stress is not an expressive term leading to NM as the researches informed. it has no relation to NM.
17. Heavy meal and non Rt side sleeping position were more strongly have a role as a triggers for NM (Bangungut).and may lead to SUNDS.
18. There were no comparable studies in all previous researches and studies- in concern to NM , SUNDS.

Alfleesy Hypothesis: The Right side sleeping position hypothesis

The author concludes that the current information, facts, and knowledge resulted in this study established the validity on which the author suggested his hypothesis. Why Rt side sleeping position is safe?, and why are other non Right-side sleeping positions are danger?.

It is well known in –scientifically- in all studies that:

1. The increased collapsibility in obstructive sleep asphyxia can be caused by an anatomical narrow pharynx, in non Rt side position.
2. The Right-side sleeping position can have a protective function by preventing the tongue from occluding the airway when the genioglossus muscle is hypnotic. While occlusion happens in non rt.
3. The prone / supine sleeping positions have been found to be associated with an increasing of airflow resistance, lowering the arousal threshold and the possibility of mechanical occlusion of the upper respiratory passage.^{1,8,16}.
4. Laying on Right side will ensure smooth breathing and lowering the resistance to breathing.
5. The liver in the right side of the body constitutes the base on which other organs lay down directly or indirectly in this position as it is the heaviest organ of the body.
6. Laying on right side position permits to establish a suitable direction to the stomach with its content of food that facilitates a smooth breathing.

So in an effort to solve this controversial problems the author wishes to put forward his right side sleeping position hypothesis to prevent NM, Bangungut, SUNDS, among adults as follow : If an individual laying for sleeping on right side position after having a light meal, then, NM and SUNDS would be prevented.

The author believes that the mechanism of death is occurring mainly by mechanical obstructive asphyxia (hypoxia) which may end by stimulating vagal inhibition.

Surprisingly that no scientists or physician gave advice to adults for this concern while they were in need for bthis advice more than adults.

The absence of death mechanism for SUNDS and the other safe Right-side sleeping position support my hypothesis.

VIII. RECOMMENDATION

The prone position is prohibited in Islamic instructions as the prophit stated:

Ya'ish ibn Tikhfa al-Ghifari said, "My father said. "Once while I was lying on my stomach in the mosque, a man moved me with his foot and said " This position which Allah hates." He said "I looked up and it was the Messenger of Allah, may Allah bless him and grant him peace (PBUH)."

The instruction of our Prophet Mohamed (PBUH) informed us that "the prone (front) position is prohibited. and the right side position is advised to be the side of sleeping.

Comment

It is clear that (SIDS) in infants and (SUNDS) in adults share several features that suggest they constitute a distinct one syndrome , taking into consideration the age .This also encourage us to think about one definition only of :(sleeping position death syndrome By all the results of this study, we feel that now it is possible for distinguishing SUNDS, NM. And near- miss SUNDS, ALTE, SIDS, by having the already mentioned criteria and characteristics.

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