

Impact of Smartphone's on Sexual Dysfunction among the Casablanca's Population

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Abstract: *Addiction to mobile phones has become a social scourge since the widespread use of smartphones. If anxiety, depression and insomnia are described consequences of overuse of screens. What would be the effects of the latter on the sexual health and erectile function of the exposed subjects? Can we consider the manipulation of smartphones in bedrooms in couples as a risk factor for sexual dysfunction? This is a study conducted by the Urology Service and the sexual health center of the Cheikh Khalifa Hospital in Casablanca, the aim of which is to establish the cause and effect relationship between the excessive use of smartphones and sexual disorders. This study targeted the population of the city of Casablanca, represented by a sample of 600 people, whose choice was made at random. Only married subjects were included in the study, 452 people including (240Men / 212Women) The survey was conducted in the form of a questionnaire administered electronically. The collection of responses lasted four weeks. Our results showed that 50.5% are not satisfied with their sexuality, 11.5% of those surveyed report severe erectile dysfunction, 35% suffer from low libido, 20.4% have premature ejaculation and 20% of women have dyspareunia. Also our results showed that 82.9% of patients with sexual disorders use smartphones as well as other electronic products simultaneously, 12.5% of people who use multiple electronic products at the same time suffer from erectile dysfunction and only 14% of patients with erectile dysfunction link their disorder to excessive use of smartphones. Detailed analysis of the responses showed an increase in the incidence of sexual dysfunction, more precisely with the age group ranging from 20 to 45 years. This prevalence is particularly high in subjects using several electronic products at the same time. The rate of sexual disorders is particularly high among couples using smartphones in the bedroom. So smartphones constitute a risk factor for sexual disorders and aggravating factor.*

Keywords: Sexual Dysfunction, Survey methodology, Urology, Smartphones

1. Introduction

Smartphones operate using a wide range of frequency bands that emit radiofrequency electromagnetic waves (EMW). Recently, a significant number of studies re-ported on the potential harmful effects of cell phone usage [1]. Moreover, in 2011, The WHO classified radiation emitted from cell phone as grade 2B carcinogenic, which could indicate possible carcinogenicity to humans [2]. The link between smartphone usage and men's health hazards was proven in a number of studies that focused on the male reproductive health. The potential that the adverse effects of cell phone technology may have on male fertility were subjects of extensive investigations over the past three years with many researchers reporting significant adverse effects of men's semen parameters, including motility and morphology [3]. Erectile dysfunction (ED), the inability to attain or maintain a penile erection sufficient for successful sexual intercourse, is a very common clinical condition that can affect up to 50% of men over 40 years old [4]. Among the risk factors for ED are diabetes mellitus, hypertension, obesity, and hypercholesterolemia [5]. The objective of the present pilot study was to report our experience concerning the effects of cell phone usage on erectile function (EF).

This paper is organized as follows: next section 2 will review history of Smartphone's; section 3 will explore the impacts of Smartphone's on social and sexual dysfunction sectors; and finally this study summarized the impacts of

Smartphone's on sexual dysfunction among the Casablanca's Population and concludes.

2. History of Smartphone's

Today's Smartphone's has been around since last six years when Apple introduced the Smartphone in mass consumer market, but in reality the Smartphone has been in market since 1993. The different between today's Smartphone and early Smartphone's is that early Smartphone's were predominantly meant for corporate users and used as enterprise devices and also those phone were too expensive for the general consumers [5]. The Smartphone era is divided into three main phases. First phase was purely meant for enterprises. During this phase all the Smartphone's were targeting the corporations and the features and functions were as per corporate requirements. This era began with the advent of the very first Smartphone _The Simon' from IBM in 1993. Blackberry is considered as the revolutionary device of this era, it introduced many features including Email, Internet, Fax, Web browsing, Camera. This phase was totally based on Smartphone targeting enterprises [6] [7]. The second phase of Smartphone era started with the advent of iPhone, the major breakthrough Smartphone market in 2007. Apple revealed its first smart phone in 2007. This was the time when first time ever industry introduced the Smartphone for general consumers market [8]. End of 2007 Google unveiled its Android Operating System with the intention to approach the consumer Smartphone market. The emphasis during this time period was to introduce

features that the general consumer requires and at the same time keep the cost at lower side to attract more and more customers. Feature like, email, social website integration, audio/video, internet access, chatting along with general features of the phone were part of these entire phone [8] [9] [10] [11]. Third phase of Smartphone was mainly closing the gap between enterprise centric and general consumer centric Smartphone and improvement the display quality, display technology and on top of that also aiming to stabilize the mobile operating system, introduce more powerful batteries and enhance the user interface and many more features within these smart devices. This phase logical started in 2008 with the upgrades in the mobile operating system and within last five year there have been several upgrades in Apple iOS, Android and Blackberry OS. The most popular mobile Operating systems (iOS, Android, Blackberry OS, Windows Mobile) and key Smartphone vendors (Apple, Samsung, HTC, Motorola, Nokia, LG, Sony etc.) are concentrating to bring features both in operating systems and devices which will provide exciting feature to enterprise and general consumers. The role of Android has been tremendous during this time period as it provided a great opportunity to all vendors to build devices using the great open source Android technology [8] [9] [10].

3. Impacts of Smart Phones on Sexual dysfunction

Smartphone has impacted almost all walk of human life. The prominent areas, where impacts of Smartphone are obvious include social and sexual life. Mobile technology has drastically changed the cultural norms and behavior of individuals. The impacts are both at the positive side and also at the negative side. At one end Smartphone are enabling people to create their own micro-cultures and engage into activities considered dangerous of society and on the other end Smartphone enabling people to remain connected all the time [12]. The subsequent sub-sections of this study provide detailed account on positive and negative impacts of Smartphone on society.

According to a survey almost half of Smartphone users use their phone for access health related services.

The convenience that Smartphone bring in daily life is tremendous, users with a click or simple touch of finger can access the health and related services anytime and anywhere, but along with the convenience it also poses several dangers as well. According to a recent article from CNN [15] this convenience of Smartphone access to health resources can be dangerous if patients start avoiding personal interactions with doctors for mandatory tasks. According to the article, on average, the targeted users use to check their phones 34 times a day, but not necessarily that it was really needed to check emails instead it is habitually checking, which may result, in relying on phone more than doing things themselves. Another aspect that has been noticed is that lots of parents let their kids carry and use Smartphone's even in their very young age.

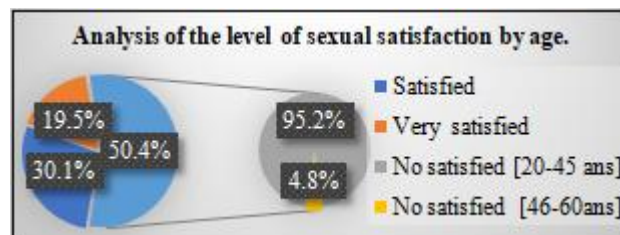
Erectile dysfunction (ED), the inability to attain or maintain a penile erection sufficient for successful sexual intercourse, is a very common clinical condition that can

affect up to 50% of men over 40 years old [4]. The objective of the present pilot study was to report our experience concerning the effects of cell phone usage on erectile function (EF).

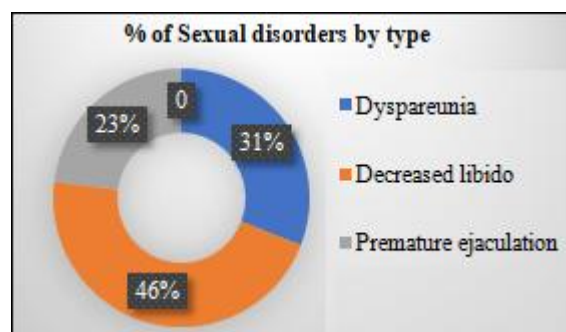
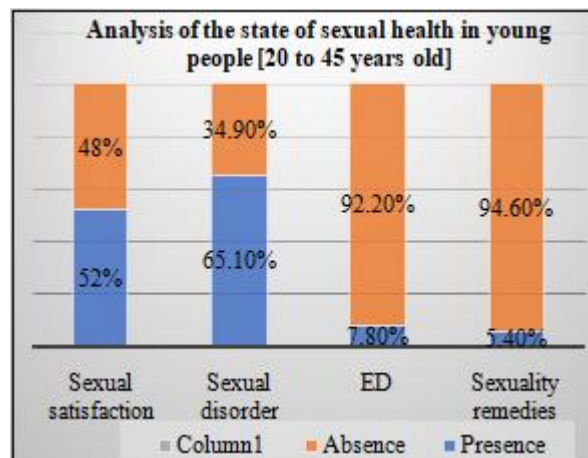
4. Results

All the people who answered the questionnaire have a smartphone.

50.4% of them expressed a reduced level of sexual satisfaction, of which 25.44% were not at all satisfied. (95.2% of these categories are young people between the ages of 20 and 45).



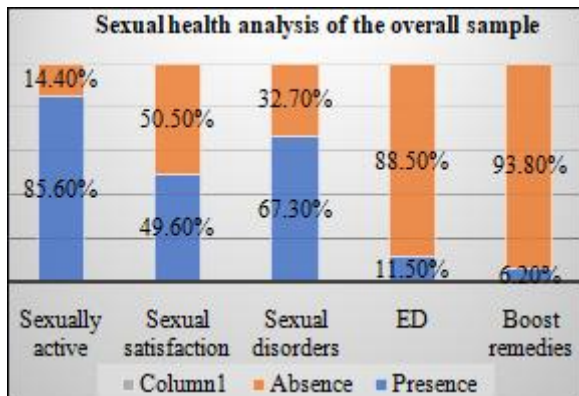
Strict analysis of the age group [20-45 years] has shown that 48% are not sexually satisfied, 65.1% have already presented a sexual disorder and 5.4% have already had recourse to natural or pharmaceutical products in order to boost their sexuality. The rate of erectile dysfunction in this segment was 7.8% according to the same study.



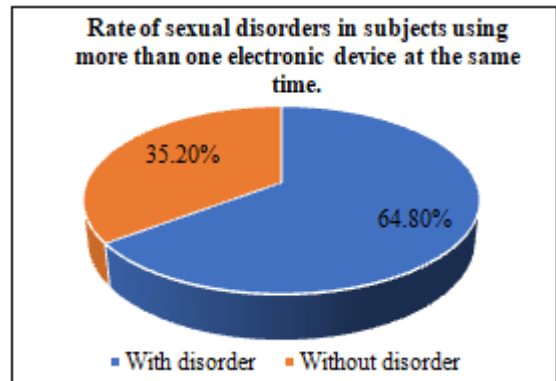
On the total sample:

- 85.6% of people surveyed are sexually active.
- 67.3% declared having already presented one or more of the following sexual disorders (Dyspareunia, decreased libido, premature ejaculation).

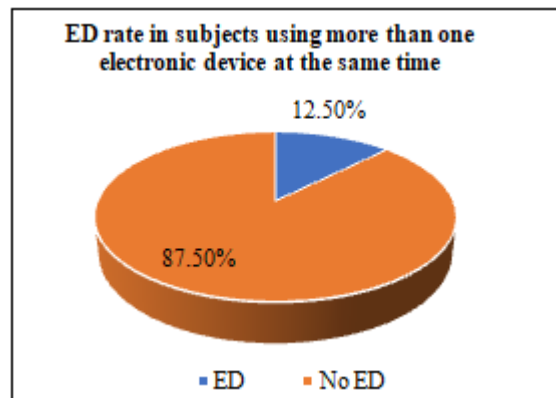
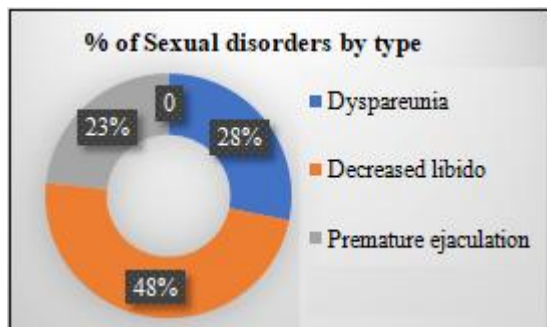
- 11.5% suffer from ED. (Of which 53.8% are young people between [25-45 years old])
- 6.2% admit having already used natural or pharmaceutical remedies to boost their sexuality.



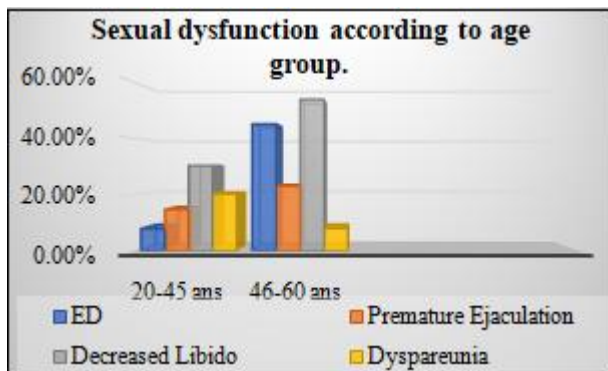
- 82.9% of patients with sexual disorders use cell phones and other electronic products simultaneously.
- 12.5% of people who use more than one electronic product at the same time suffer from erectile dysfunction.
- 94.4% use their phones in the bedroom, 72% of which have sexual problems: (35% Decreased Libido, 18% Dyspareunia, 19% PE).
- 11.6% of couples using cell phones in the bedroom have ED.



- The study of the prevalence of sexual disorders by type showed a predilection for low libido.



In total, and by comparing these data respectively between the two age groups [20-45 years] and [46-60 years]



- 9.2% only of people with a sexual disorder establish a link between their disorder and the cell phone.
- 14% of patients with erectile dysfunction say excessive cell phone use may be a cause.

5. Conclusions

The detailed analysis of the responses showed an increased incidence of sexual dysfunction specifically in the age group between 20 and 45 years.

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This prevalence is particularly high in subjects using several electronic products at the same time.

The rate of sexual disturbances is particularly high among couples using cell phones in the bedroom.

So the smartphone is a risk factor for sexual disorders and an aggravating factor.

Correlation of sexual health status and excessive use of cell phones:

- 100% of people surveyed use smartphones (of which 75.2% use it very frequently)
- 93.8% own other electronic products and 85% use them and smartphones at the same time.
- 80.5% of the people who answered the survey never put their phone in airplane mode before going to bed at night.

Here are some results of a cross-analysis between sexual dysfunction and the concomitant use of several electronic products:

There may be a relation between cell phone usage and erectile function. Further larger studies are recommended to confirm our findings.

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