

# Night Float System: Impact on House Officers and Patients of KKH

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## Introduction

The Night Float(NF) System was introduced to the house officers(HOs)/postgraduate year 1 residents in the Division of Obstetrics and Gynaecology, KK Women's and Children's Hospital (KKH) in April 2014. Prior to that, HOs were doing oncall from 4 30pm till 1230pm the next day after working continuously from 8am till 4 30pm that day. This shall be referred to as conventional call (C). The night float system allows HOs to work from 8pm to 8am the next day, Sunday to Thursday. Doctors can thus avoid working 30 hour shifts except Fridays and Saturdays which they take turns to do. <sup>1</sup> The intention was to ensure that the HOs get ample rest to reduce excessive fatigue and reduce risk of potential human error in management or documentation <sup>1,2,4</sup>.

# **Aim**

To further evaluate the effectiveness of this newly implemented system in our department and its implementation in the long run.

# Method

Data was collected via a questionnaire targeted at 3 main groups of house officers (HOs) according to their posting period: 1) conventional call system 2) interim when change was implemented 3) night float. They were assessed based on 3 main aspects: personal wellbeing, patient care and work quality and overall experience.

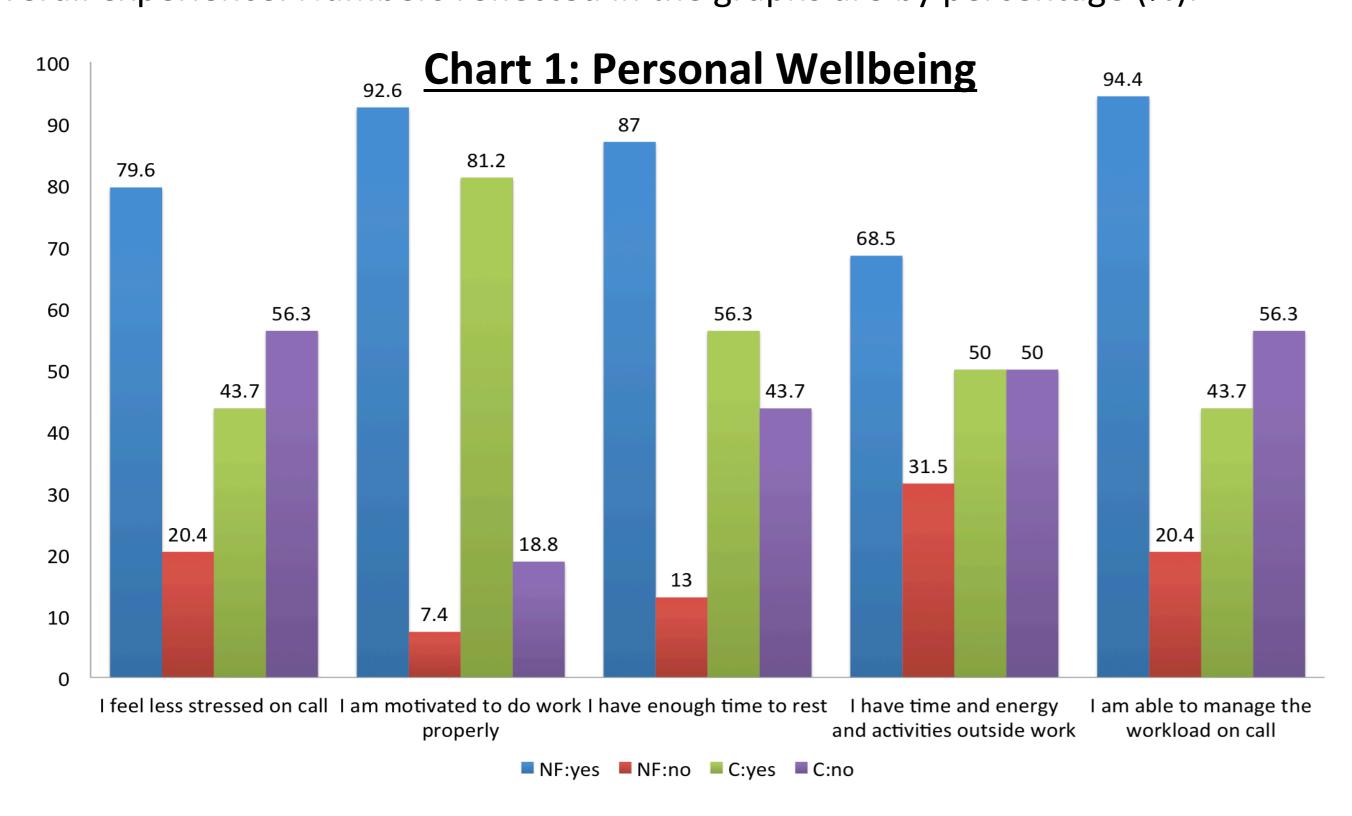
### Results

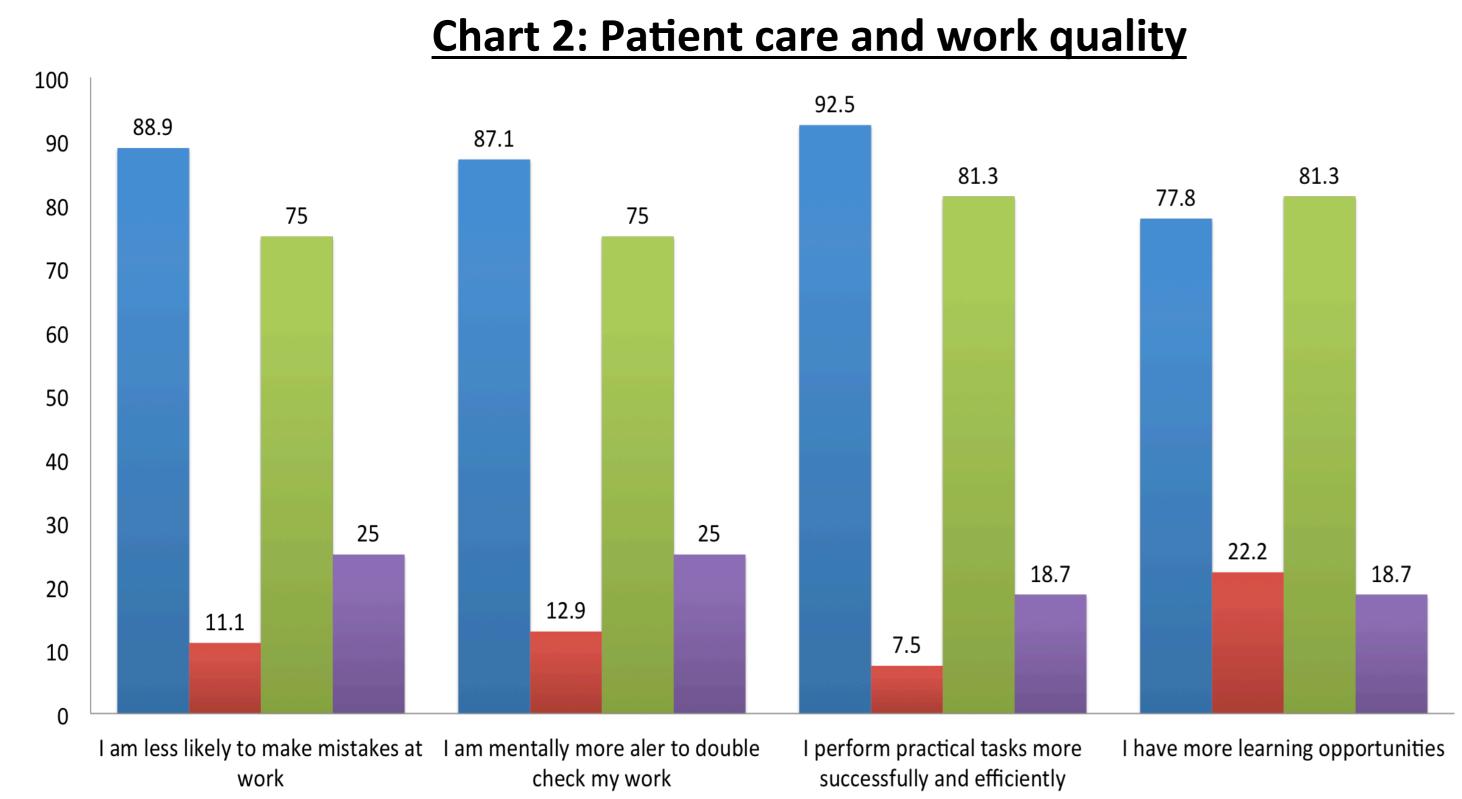
A total of 104 HOs posted from October 2013 to October 2014 were surveyed. 70 responders were assessed. Non-responders were excluded.

38 HOs were doing conventional calls only, 19 were in the interim period and 47 were doing night float only. A total of 66 HOs were exposed to the night float system. Among those that responded, 54 HOs were exposed to the night float system and 16 HOs were doing conventional calls.

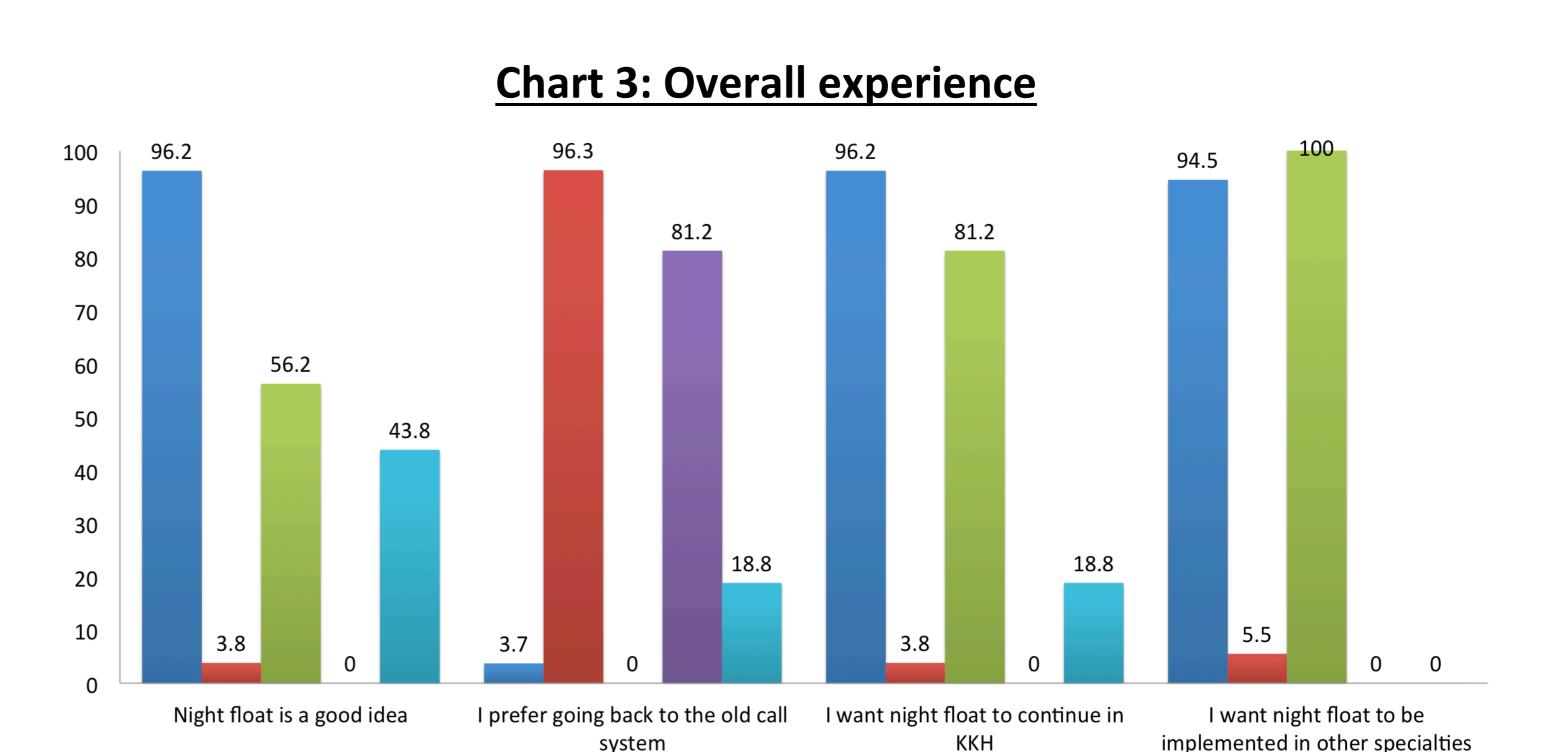
Results were tallied and subdivided according to those from night float (NF) and conventional call (C) according to each response, yes (NF:yes/C:yes) or no (NF:no/C:no). Responses were then calculated according to those responded yes or no.

Below are 3 different charts reflecting results from the survey, whereby questions were divided according to the 3 aspects: Personal well being, Patient care and work quality, and Overall experience. Numbers reflected in the graphs are by percentage (%).





■ NF:yes ■ NF:no ■ C:yes ■ C:no



### **Discussion and Conclusion**

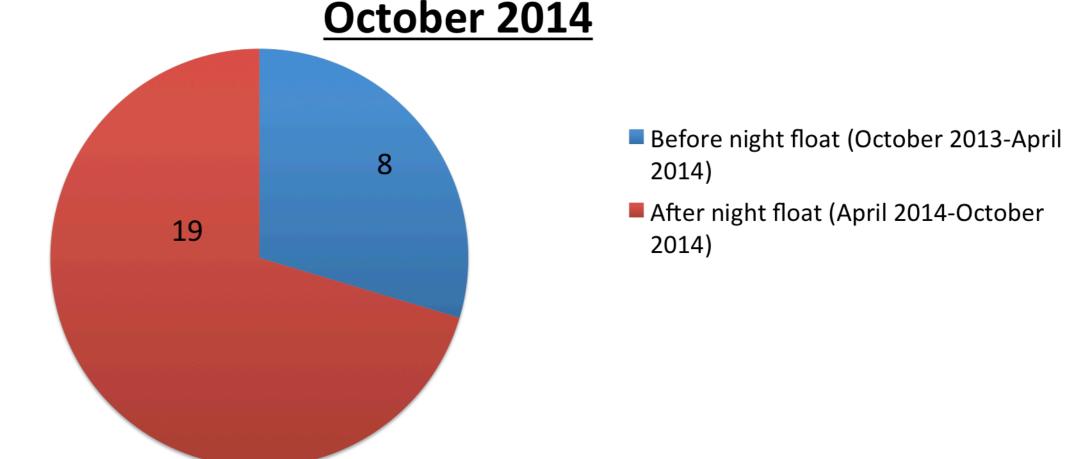
In the aspect of personal wellbeing, the night float group consistently had a higher percentage in all aspects of wellbeing assessed. This included work motivation, adequate rest, work life balance and mood<sup>1</sup> with at least 50% more people also reporting less stress at work and 30% reporting better management of the given workload.

■ NF :yes ■ NF: no ■ C: yes ■ C: no ■ C: not applicable

In terms of patient care and work quality, a higher percentage of those who did night float also reflected better patient care, decreased propensity for mistakes<sup>3,4</sup>, improved communication with colleagues and patients.

Objective data was also obtained from our hospital patient service quality department on the number of complaints and compliments received during the period of study. The data analyzed showed an increase in the number of compliments by more than 50% in the 6 months after night float was implemented in April 2014. The number of complaints received during the period was however minimal, with 1 complaint received in the period before float, and 2 complaints in the period after night float was implemented. While it appears that there is a higher number of complains received after float, this is likely attributed to the larger sample size in the night float group compared to the conventional call group. The overall percentage of complains in both groups is still comparatively stable (2.6% conventional call vs 3% night float)





Overall, a large majority of HOs surveyed felt that night float was an excellent idea and supported its continuation in Division of O&G, KKH. This positive response included more than 50% of those who belonged to the conventional call group. Additionally, at least 94% of those who did night float and a 100% of those who did conventional call were in favour of this system being implemented in other specialties as well.

A follow up survey was also conducted on 11 HOs posted between January to April 2016. The results reflected sustained support for the float system 2 years on. More than 90% indicated overall improved personal wellbeing and work quality in the areas mentioned above. 100% of those surveyed were also in favour of the float system over conventional calls.

This serves as an encouragement towards the long term implementation and feasibility of this system in Division of Obstetrics and Gynaecology, KKH. The general consensus towards night float is positive.<sup>4</sup> While this is still a new system, it has potential for further expansion towards other sponsoring institutions and departments for the benefit of the House Officers.

# Reference

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