



INITIATION AND ADHERENCE TO NURSING/MIDWIFERY PROACTIVE PATIENT ROUND AT INPATIENT UNITS OF ST. PAUL'S HOSPITAL MILLENNIUM MEDICAL COLLEGE, ETHIOPIA, A QUALITY IMPROVEMENT PROJECT FROM ETHIOPIA, 2022.

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ABSTRACT

Background: Proactive patient round is contributing to purposeful and timely rounding for best practice intervention to routinely meet patient care needs, ensure patient safety, to decrease the occurrence of patient preventable events, and proactively address problems before they occur, collaboration between clients, family and nurses.

Local problem: Based on our clinical placement experience and baseline data finding, nurses/midwiferies didn't attend proactive patient round, which leads to communication breakdown and insufficient information being exchanged between the clients, family and nurses & can have adverse effects on the quality of care provided at all inpatient service area.

Methods: The study was conducted at St. Paul's Hospital Millennium Medical College in all inpatient units from December 1, 2021, to May, 2022. We prioritize the identified gaps by key drivers and implemented several low-cost interventions using Plan-Do-Study-Act cycles.

Interventions: Since there was no proactive patient round formats, we have prepared proactive patient (2/3 hours) round formats and awareness creation for working staffs about the contribution of proactive patient (2/3 hours) round was mad. We also preparing one formats for daily activity, shift hand over and procedure note to reduce redundant documentation.

Results: Overall, in St. Paul's hospital ten inpatient unites nursing proactive patient round activity was increased to 93%. On average by the end of six months of initiating the project from the baseline zero percent to this result. As a result, there was a decreased frequent patients coming to the nurses/midwifery station to get nurses/midwives. And patient satisfaction also improved.

Conclusions: Proactive patient round is very crucial to improve quality of health care and patient/attendant satisfaction by health care. It is a minimum requirement to follow patients, which means every hospitalized patient are followed by their nurses/midwifery at least every 2 hours in the day time and every 3 hours at night time.

Key terms: Quality Improvement Project, PDSA, Proactive patient round, SPHMMC

1. INTRODUCTION

Nurses are involved in many activities in a hospital from patient admission through discharge. They provide continuous 24-h patient care, which is divided into several shifts(1). Patient care includes performing assessments, stating nursing diagnoses, developing intervention plans, implementing care, and making evaluations to modify or terminate care. Examples of nursing interventions include discharge planning and education, the provision of emotional support, self-hygiene and oral care, monitoring fluid intake and output, ambulation, the provision of meals, and surveillance of a patient's general condition(2). The delivery of nursing care should involve the patient. A nurse respectfully communicates, coordinates, and integrates nursing care, provides education and information, and considers the comprehensive and continuous physical and emotional comfort of the patient(3).

Proactive patient round is contributing to purposeful and timely rounding for best practice intervention to routinely meet patient care needs, ensure patient safety, to decrease the occurrence of patient preventable events, and proactively address problems before they occur, collaboration between clients, family and nurses (4).

In our institution, SPHMMC nurse / midwife perform direct services are in an excellent position to identify the need for change in service delivery processes. Based on this premise, the staff nurse / midwife--who is at the heart of the system--is the best person to assess the status of health care services and to work toward improving the processes by which these services are provided to clients in our health care institution.

Through our data collection by chart review, client interview & clinical observation, we had identified major & basic nursing / midwifery care service gaps which is contributing positive health outcome of our clients. Among those identified gaps proactive patient round was selected & prioritized by priority matrix & focusing matrix. Based on our baseline assessment, nursing proactive patient round was not conducted before.

2. NEED OF THE STUDY

Proactive patient round was not conducted for all patients which leads a difficulty to meet the intended patient care needs, to ensure patient safety, to decrease the occurrence of patient preventable events, and proactively to address problems before they occur, and collaboration between clients, family and nurses. Therefore we, St. Paul's Hospital Millennium Medical College Nursing/ Midwife quality improvement & clinical auditing team, aim to improve nursing proactive patient (two hours individual) round 50 % from 0% by May, 28 /2022 at St. Paul's Hospital Millennium Medical College all inpatient service area

3. Methods

Study setting

St. Paul's Hospital Millennium Medical College is located in Gulele sub city Addis Ababa, Ethiopia. The hospital has 62 unites with more than 700 beds. Among those 10 are inpatient units. Total number of nurses and midwives are 909, 114 respectively. In inpatient units' nurse/midwife to patient ratio is 1 to 6. Before the implementation of this project, there was no nursing proactive patient round. This quality improvement project was conducted at all inpatient units of St. Paul's Hospital Millennium Medical College.

Among those proactive patient rounds were performed in 10 inpatient unites which include both maternity A and B, gynecological ward, female and male medical ward, both adult and Pedi surgical wards, transplant ward, maxillofacial and pediatric ward. The project was conducted from December 1, 2021 to May, 28/2022.

Study design and method

This study was conducted with continuous, detailed meetings and discussions to prepare proactive patient (2/3 hours) round in the hospital. During baseline assessment nurses/midwifery didn't attend proactive patient round, which leads to communication breakdown and insufficient information being exchanged between the clients, family and nurses & can have adverse effects on the quality of care provided at all inpatient service area. Following these, PDSA model for quality improvement was implemented to test intervention ideas/strategies and followed for an improvement in the processes or outcomes in the project with specific measures.

Data collection and analysis

As baseline assessment as well as follow-up in-hospital nurses/midwifery didn't attend proactive patient round. This finding was collected from patient interview and medical charts. Data was presented with simple descriptive statistics such as frequency distributions were done as appropriate and the result was presented in tables, graphs and run chart.

Strategy and implementation

The Nursing/Midwifery quality improvement team studies why nurses and midwiferies didn't attend proactive patient round and doing root cause analysis, plot possible intervention packages with subsequent implementation sequentially and follow-up of the project.

Root cause analysis/Fishbone diagram

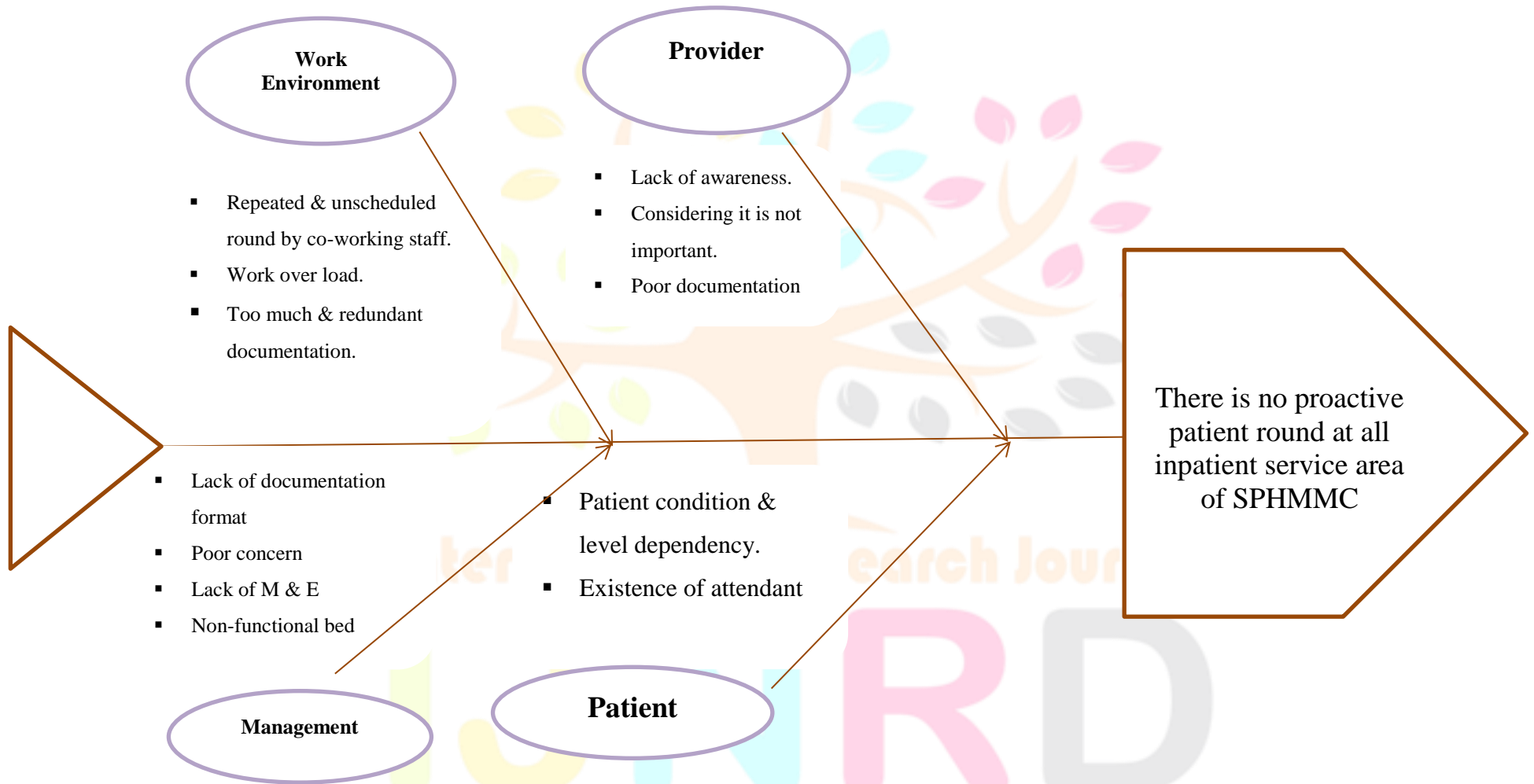


Fig 1. Fish Bone Diagram illustrating root causes of Absence of Nursing / Midwifery Proactive Patient Round at Inpatient units of St. Paul’s Hospital Millennium Medical College

Driver diagram

Depending on the root causes identified (figure 1); three primary drivers, eight secondary drivers and nine change/intervention ideas were schemed to achieve proactive (2/3 hours) round increases to 50% from zero in inpatient units of St. Paul's Hospital Millennium Medical College (figure 2).

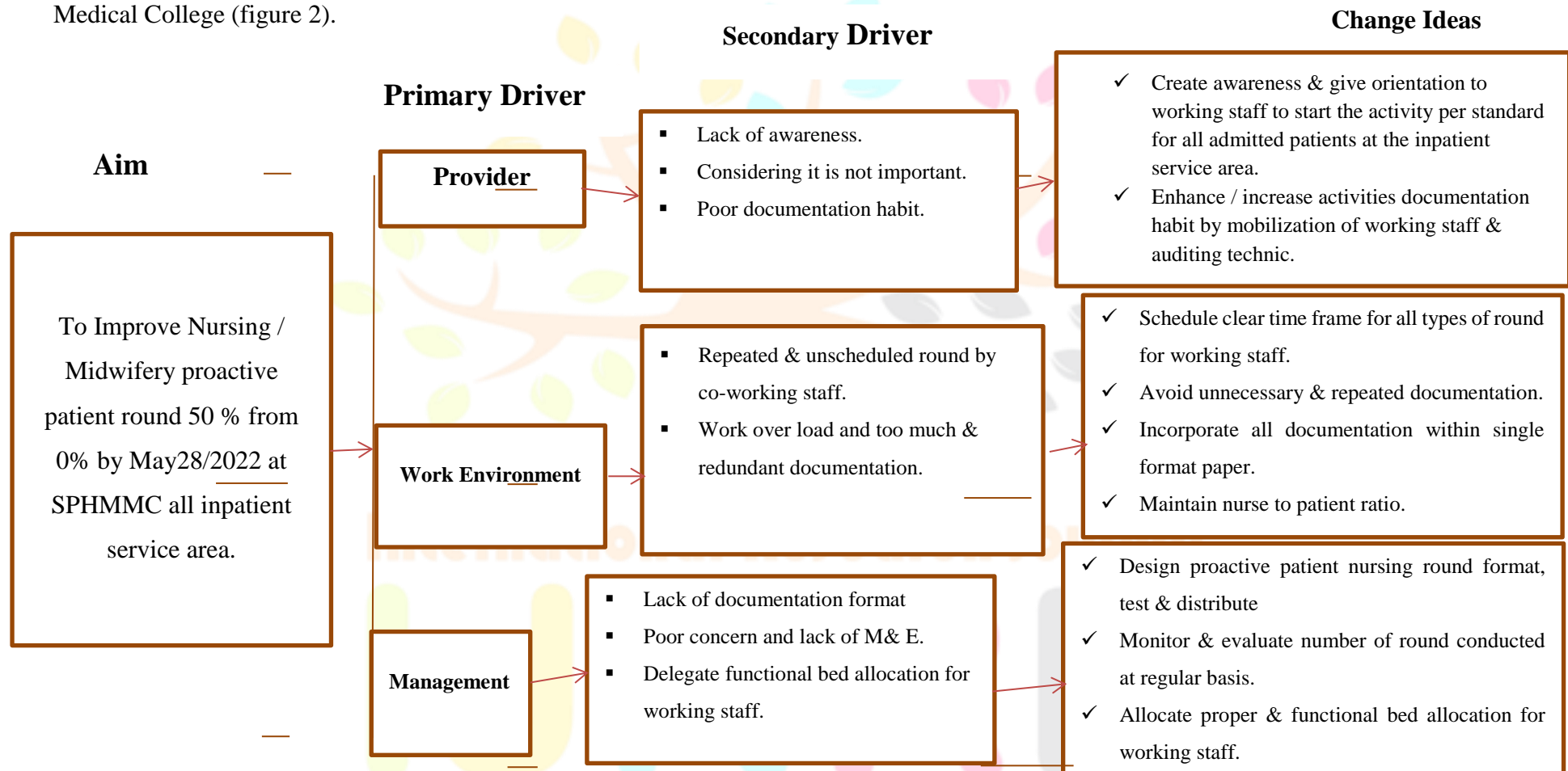


Fig 2. Driver diagram showing the aim, primary and secondary drivers, and intervention/change ideas to improve *nursing / midwifery proactive patient round 2021/22*

Measures

Process measures

✚ Percentage of expected proactive patient round performed in the selected patient charts among admitted patients every two weeks.

Outcome measures

✚ Expected proactive patient round performed

✚ Patient satisfaction

✚ Frequency of patients coming to the nurses station to get nurses

PDSA implementation

Based on the driver diagram in figure 2, we select three change ideas that have higher score using priority matrix to implement and test using a PDSA cycle. Each change ideas were implemented starting from December 1, 2021 consecutively every two week in each unit. We record and track all admitted charts and lasts two hours every two weeks bases. Depending on the findings, we made an iterative assessment of each PDSA cycle to sustain strengths and devise solution for drawbacks to achieve better outcome.



Table: 1 PDSA-Plan Do Study Act; Nursing/Midwifery quality improvement & clinical audit Team; nursing/midwifery proactive patient round.

PDSA Cycle	Plan	Do	Study	Act
PDSA Cycle-1: Awareness creation	We scheduled to present for all inpatient unit leaders to create awareness about the function of proactive patient round.	We were prepare presentation and present for all inpatient unit and additional one staff for each units.	All case teams were award and have good understanding about function of proactive patient round. Working staffs were seen as additional works	We trying to initiate the unit leaders to tolled the working staffs about the purposes of nursing proactive patient round.
PDSA Cycle-2: Design proactive patient round nursing format	We wanted to design proactive nursing patient round format by adopting from ministry of health through the effort of Nursing/Midwifery quality and clinical audit team.	We design proactive nursing patient round formats and distribute to all ten inpatient units.	We found that, the nurse and midwifery starts to perform proactive (every 2 hours during day time and every 3 hours during night time) round. Acceptance from the staff was difficult due to luck of awareness.	Awareness was created every week in each unit about the function of proactive patient round by Nursing/Midwifery quality and clinical audit team.
PDSA Cycle-3: Reduce Work over load and too	We planned to avoid unnecessary &	After discussion with concerned bodies, the	The working staffs were happy about the prepared formats to	We distribute and follow single format paper in order to avoid redundant documentation and proactive

<p>much & redundant documentation.</p>	<p>repeated documentation.</p>	<p>mechanism of incorporate all documentations with in single format paper in order to avoid redundant documentation by nurse / midwife quality improvement & clinical auditing team.</p>	<p>reduce the redundant documentation and starting proactive nurse/midwifery proactive patient round.</p>	<p>nurse/midwifery proactive patient round is started.</p>
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RESULT

Overall, in ten inpatient units of SPHMMC, average nursing proactive patient round increased to 93% from zero present.

See the following table and graphs about the result when each PDSA cycle is implemented.

Table 1: Proactive patient round performance in the last 6 month at St Paul's hospital millennium medical college at inpatient unit Addis Ababa Ethiopia, 2021/22.

No	Unit(ward)	December	January	February	March	April	May	Average
1	Maxillofacial Ward	86.60%	95%	96.20%	96%	99%	100%	95.47%
2	maternity A ward	82.60%	97.50%	97%	98%	99%	97%	95.18%
3	maternity B Ward	48%	73.20%	68%	99%	100%	99%	81.20%
4	Gynecology Ward	66.30%	86%	99%	100%	100%	100%	91.88%
5	Pediatrics Ward	79%	85.60%	95.30%	99.80%	99%	98%	92.78%
6	Pediatrics surgery Ward	97.80%	99.50%	100%	100%	100%	100%	99.55%
7	Male Medical Ward	83.32%	89.50%	90%	99%	100%	100%	93.64%
8	Female Medical Ward	75%	70.50%	92%	99%	94%	97%	87.92%
9	Kidney Transplant ward	100%	100%	98%	100%	100%	100%	99.67%
10	Adult surgical ward	92.86%	93.73%	93.73%	99%	93%	97%	94.89%
Average Monthly result		81%	89%	93%	99%	98%	99%	
Average 6 Month Hospital proactive round performance result						93%		

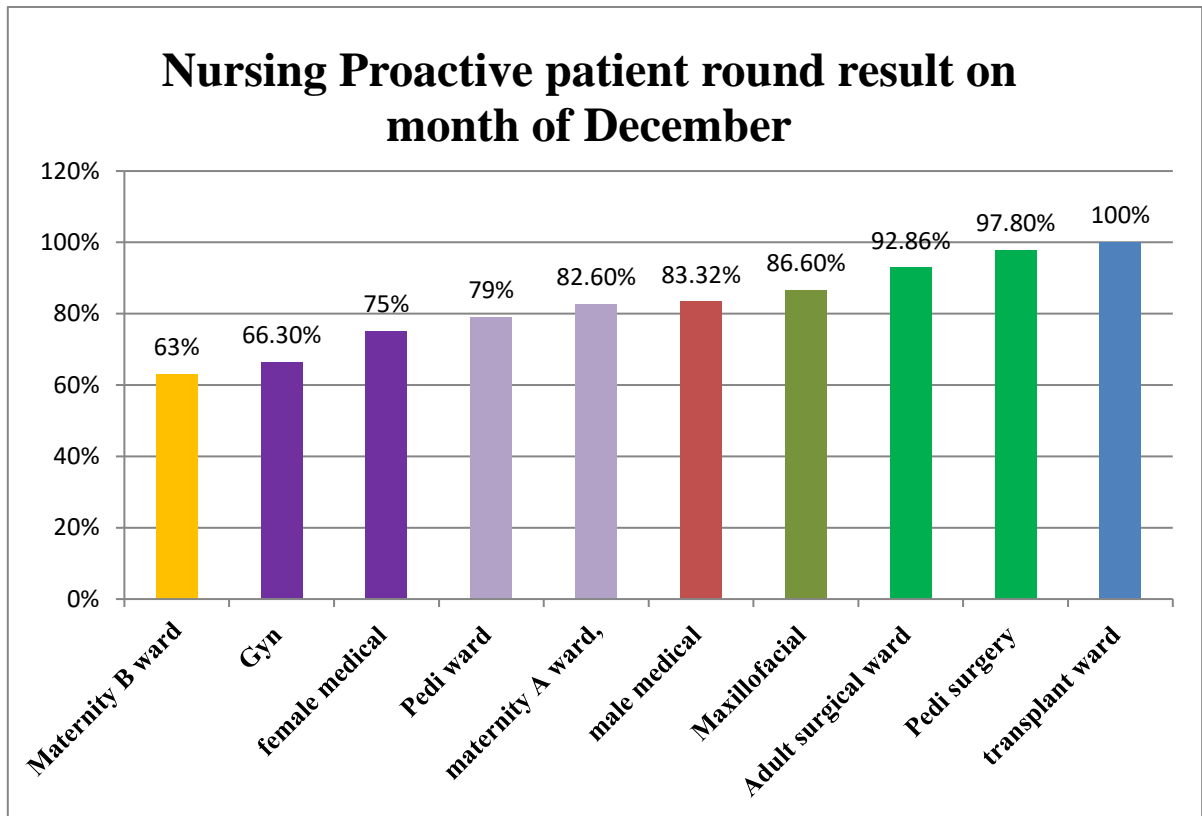


Figure: 3 Nursing/Midwifery proactive patient round results on month of December at inpatient unit of St. Paul’s hospital, 2021



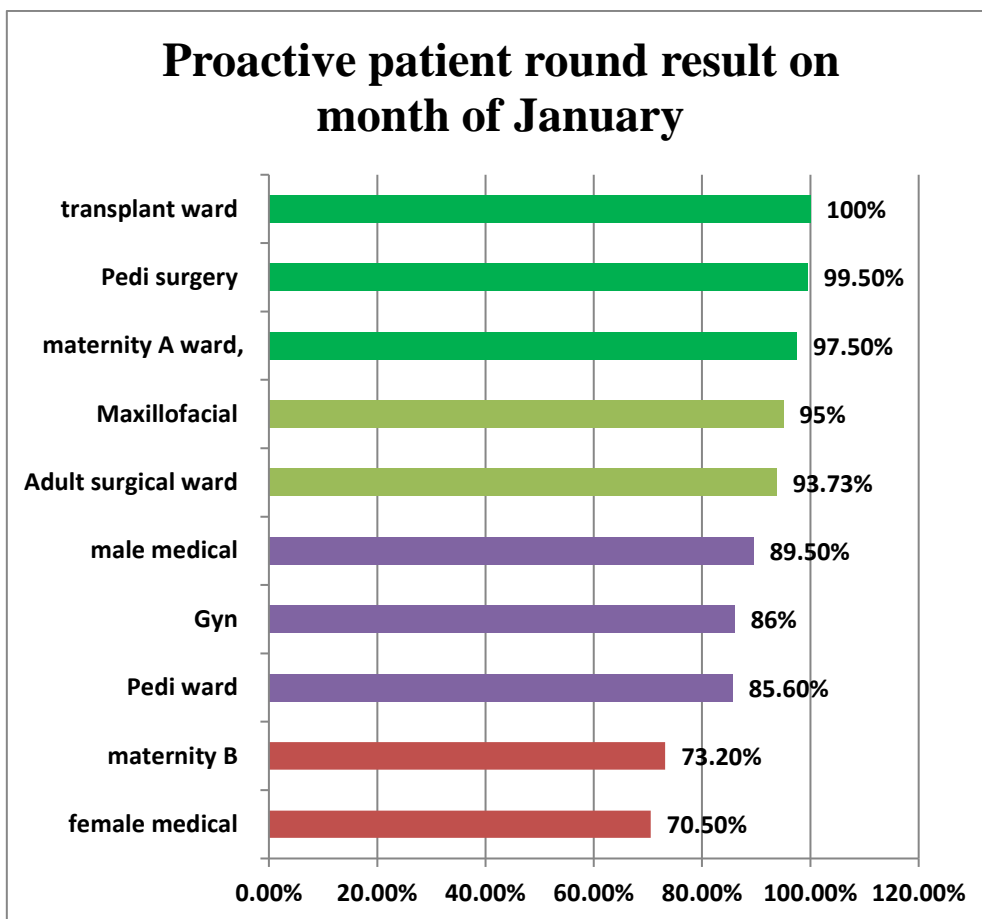


Figure: 4 Nursing/Midwifery proactive patient round results on month of January at inpatient unit of St. Paul’s hospital, 2022.

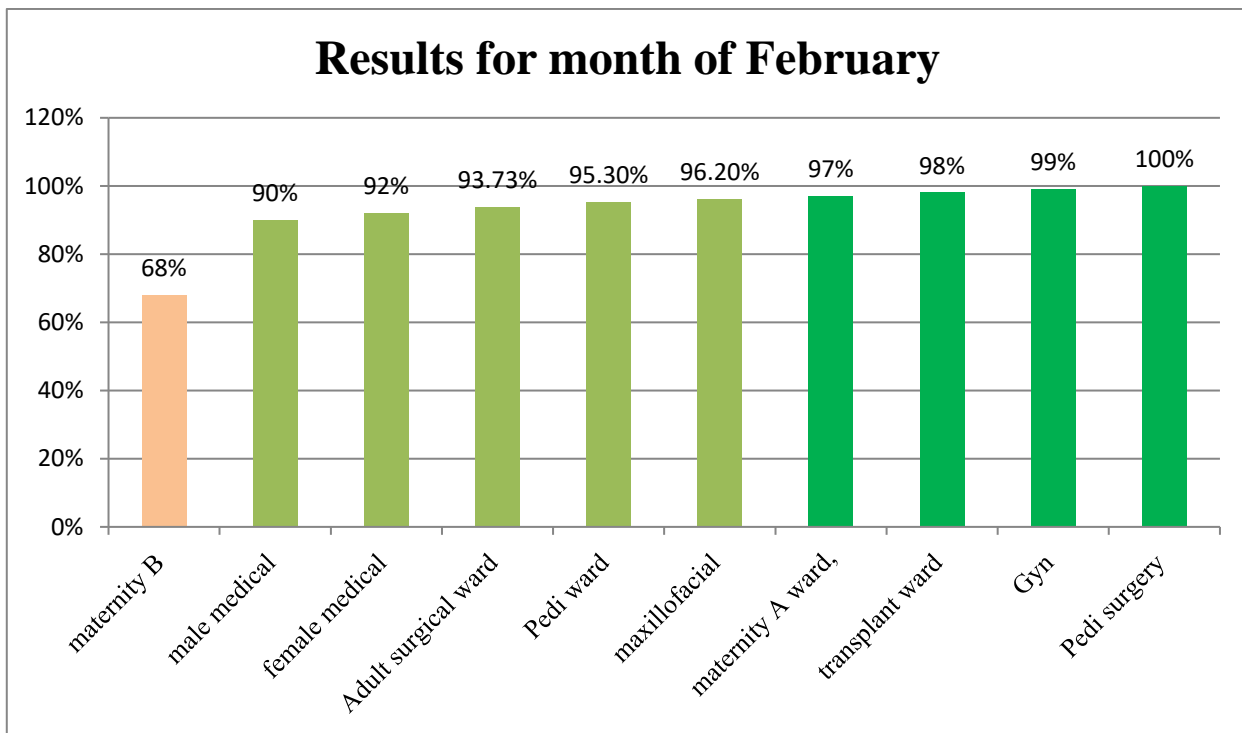


Figure: 5 Nursing/Midwifery proactive patient round results on month of February at inpatient unit of St. Paul’s hospital, 2022.



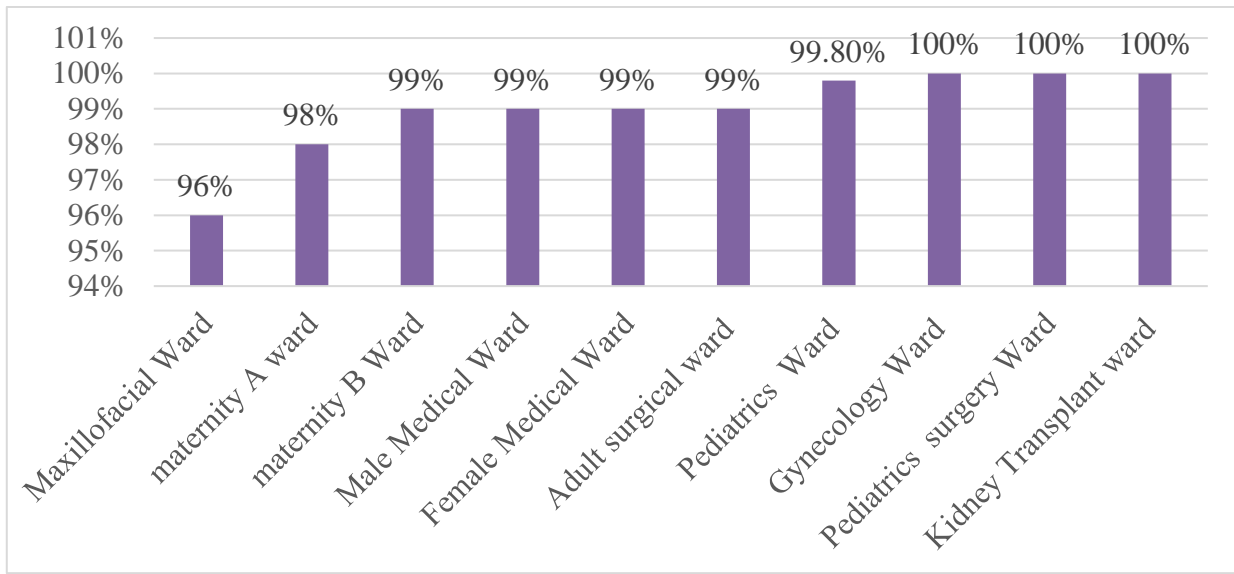


Figure: 6 Nursing/Midwifery proactive patient round results on month of March at inpatient unit of St. Paul’s hospital, 2022.

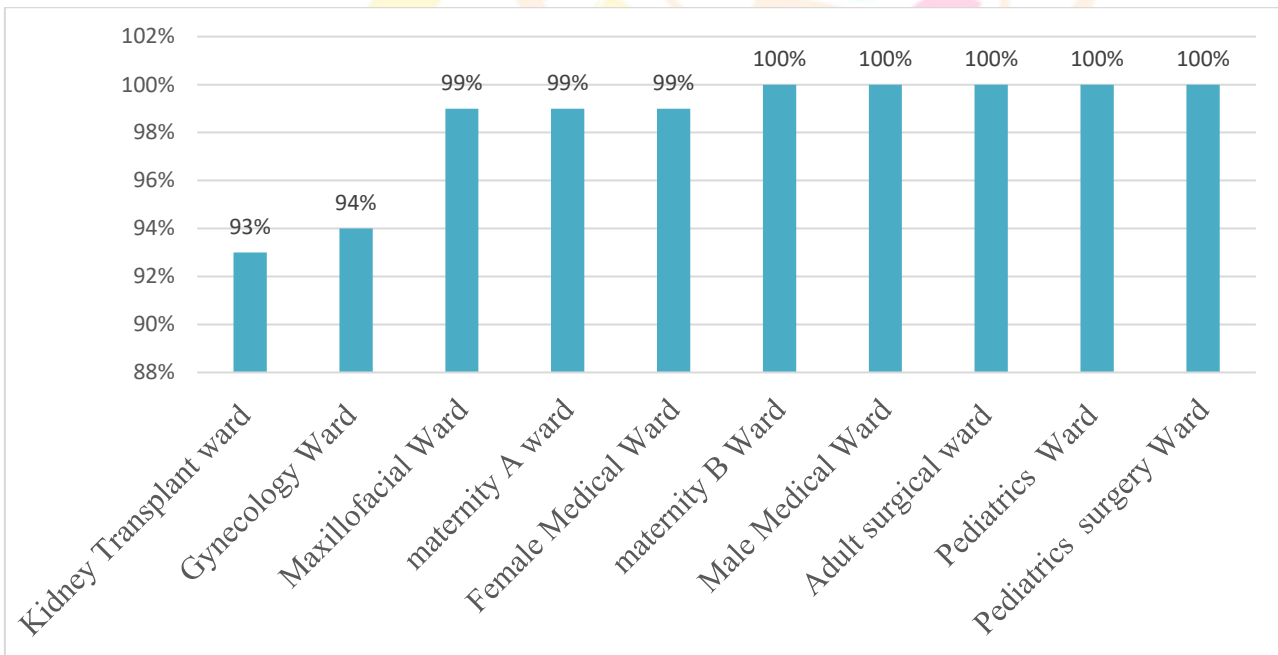


Figure: 7 Nursing/Midwifery proactive patient round results on month of April at inpatient unit of St. Paul’s hospital, 2022.

Research Through Innovation

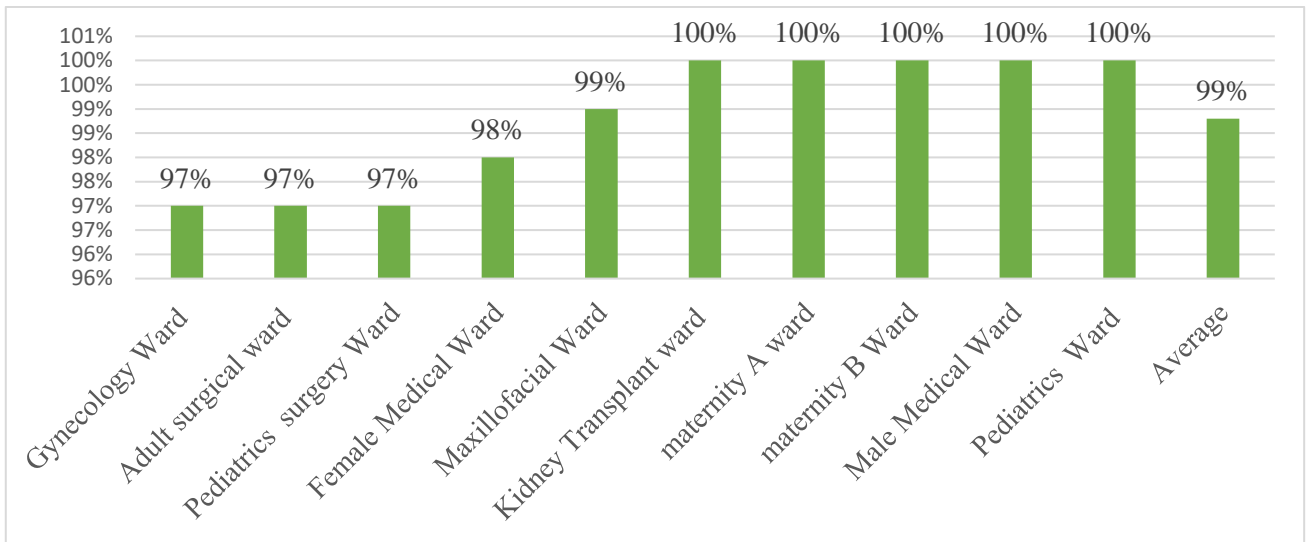


Figure: 8 Nursing/Midwifery proactive patient round results on month of May at inpatient unit of St. Paul's hospital, 2022.

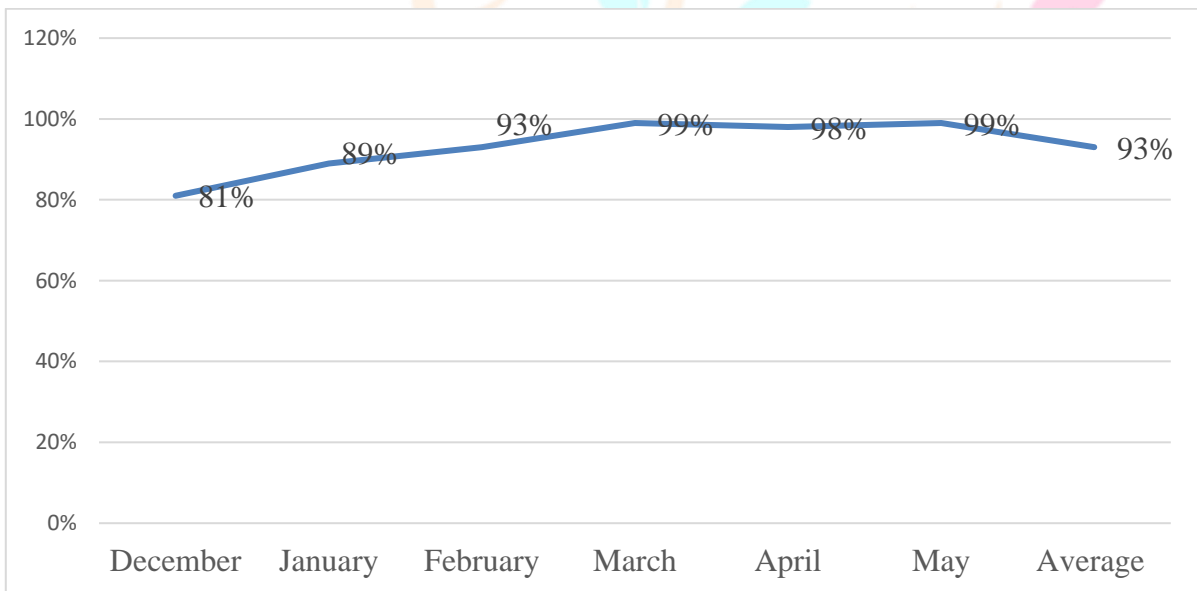


Figure: 9 Nursing/Midwifery proactive patient round results of six consecutive months at inpatient unit of St. Paul's hospital, 2022.

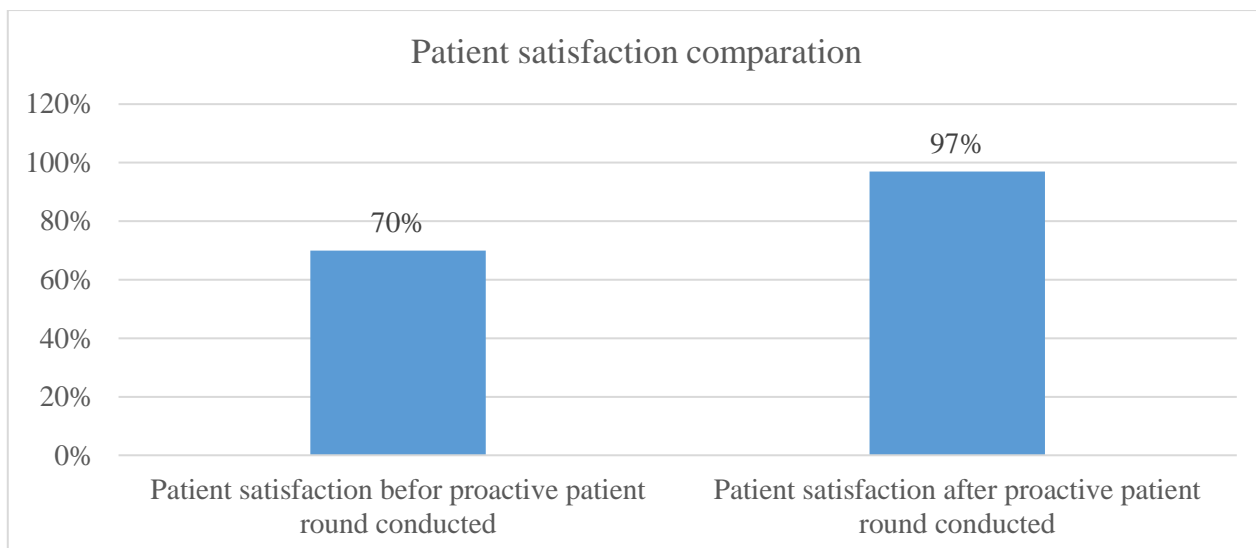


Figure: 10 Patient satisfaction comparison towards Nursing/Midwifery care before and after starting proactive nursing round results at inpatient unit of St. Paul's hospital, 2022.

Strengths and Limitation

Strengths

- + Proactive patient round formants were prepared well
- + Awareness was created for staff nurse and midwife about the important of proactive patient round and the health professionals were accepted
- + The nursing/ Midwifery quality team are closely follow the activities based on the required and staffs recorded there intervention in the chart accordingly.
- + Proactive patient round is very important to improve quality of care, increase patient nurse/mid wife relationship, patients able to get there nurses/ midwives as they want
- + Generally patient and family satisfaction on health care were increased
- + Proactive patient round is start in SPHMMC, so at national level this is used as base line for other health institution
- + There is managerial round weekly to confirm whether proactive patient round is addressed on patient or not

Limitation

- + In the first time since it is new change idea there was a challenge in side nurses and midwives to accept positively
- + Even if it is very important to improve quality of care, to increase patient nurse/mid wife relationship, patients able to get there nurse or midwife, it increases work load of staffs
- + We cannot write discussion by compared with other study due to lack of similar study

Conclusion

The theoretical principle of 2/3 hourly patient rounds is developed in ministry level so every hospital must apply it. Proactive patient round is very crucial to improve quality of health care and patient/attendant satisfaction by health care. Proactive patient round is a minimum requirement to follow patients, which means every hospitalized patient are followed by their nurses/midwifery at least every 2 hour in the day time and every 3 hour at night time. Proactive patient round is contributing to purposeful and timely rounding for best practice intervention to routinely meet patient care needs, ensure patient safety, to decrease the occurrence of patient preventable events, and proactively address problems before they occur, collaboration between clients, family and nurses.

In SPHMMC the expectation of proactive patient round was 50% but in month of December we were achieved 81%, January 89%, February 93%, March 99%, April 98%, and May 99%. This implies there is over achievement and a good attitude and practice by health professional towards 2/3 hour patient round.

REFERENCES

1. Needleman J, Hassmiller S. The role of nurses in improving hospital quality and efficiency: Real-world results. *Health Aff.* 2009;28(4):625–33.
2. Asmirajanti M, Hamid AYS, Hariyati RTS. Nursing care activities based on documentation. *BMC Nurs.* 2019;18(Suppl 1):1–5.
3. Moon M, Moorhead S. Relationship of nursing diagnoses, nursing outcomes, and nursing interventions for patient care in intensive care units [Internet]. Vol. 3526851. 2011. 167 p. Available from: http://search.proquest.com/docview/1081475100?accountid=13042%5Cnhttp://oxfordsfx.hosted.exlibrisgroup.com/oxford?url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&genre=dissertations+&+theses&sid=ProQ:ProQuest+Dissertations+&+Theses+Globa
4. Review SL, Considerations K. Representing what we do as Nurses and Midwives.
5. Patz T. Ethiopia (Federal Democratic Republic of Ethiopia). *Handb Fed Countries*, 2005. 2005;136–48.
6. Brosey LA, March KS. Effectiveness of Structured Hourly Nurse Rounding on Patient Satisfaction and Clinical Outcomes. *J Nurs Care Qual.* 2015;30(2):153–9.