# Blood extraction and leadership enhancement initiatives

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**Abstract.** Nursing leaders must build a learning organization and an environment where colleagues can flourish. Enhance professional knowledge of self-care while maintaining stable donor blood donation. Create a good initial impression with blood donors and deepen the quality of service. Support coworkers and nurses. In accordance with the Medical Device Manual and Standard Operating Procedure, conduct regular inspections and audits to ensure normal operation of blood donation instruments. Under the internal audit mechanism, individually verify and correct missing files and submit the report. Improve professional knowledge, maintain the enthusiasm and technical level of medical personnel and provide the most appropriate services for blood donors.

**Keywords:** Nursing Chief Professional Training, internal audit, Knowledge sharing, Platelet separation surgery, physical examination interview, Taiwan Blood Services Foundation.

### 1. Introduction

All nurses were entrusted with the sacred mission of saving the dying, caring for life, and selfless dedication of Florence Nightingale (May 12, 1820)[1,2], the founder of modern nursing and nursing education. International Nurses Day (IND)[3] is a spirit of universal gratitude to all nursing staff, regardless of national boundaries.

The Taiwan Blood Services Foundation has established four blood donation centers in Taipei, Hsinchu, Taichung, and Kaohsiung. The Taichung Blood Donor Centre also has several blood donation centers and mobile points for collecting blood (vehicles) under its jurisdiction. The head nurse at each blood sampling point is the person responsible for the blood donation site. A stable volume of blood collection is required on a daily basis. While ensuring safe processes to collect and report blood[4]. While ensuring safe blood collection and reporting processes.

Medical education and related medical professional training for chief nurses must follow the training process for many years, providing a significant human resource base for blood donors. When it comes to unpaid blood donors, there should be rigorous quality control. Interviews with donor health questionnaires, hemoglobin, and blood group tests. Along with medical examinations, audits, and professional ethics[5,6].

## 1.1 Professional Training Program for Chiefs Nursing

The chief nurse is the backbone of basic management, whether it's the commander of nursing technology or the person in charge of management[7]. The degree of management has a direct impact on the quality of clinical nursing care and provides an important human resource base for blood donors. The unpaid blood donors must have strict quality control; interview the health questionnaire of blood donors, friendly reception, hemoglobin test and blood type verification and other screening processes, as well as medical testing, internal audit and professional ethics[8]. Figure 1. Professional Training Project for Nursing Chief.

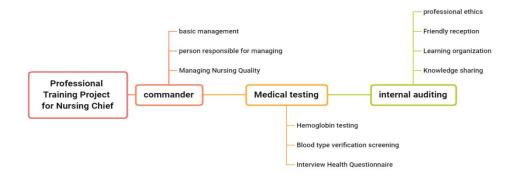


Fig. 1 Professional Training Project for Nursing Chief

### 1.2 The chief nurse works at a blood donation center

The role of the chief nurse of a blood donation station is as a designated operational leader, demonstrator, and work assignment liaison between colleagues, unpaid blood donation companion, internal audit supervisor, blood donation knowledge disseminator, blood donation spokesperson, physician assistant, and work promotion Coordination Bridge[9]. Figure 2: Professional work of the chief nurse.



Fig. 2 Professional work of the chief nurse

### 2. Internal Verification of the Performance of Senior Nurses

The Chief Nurse should consciously provide daily internal audit training or conduct an interactive evaluation by qualified personnel designated by the region with the required internal audit qualifications. According to the SOP written procedures and audit forms, the chief nurse should carry out systematic, independent inspection and audit, evaluation one by one, and use objective evidence to verify that each requirement in the quality management system can be effectively implemented, so as to achieve the overall goal of the organization. Contribute to the improvement of the functioning and quality of the organisation by confirmation and consultation activities[10]. Figure 3: Process oriented internal audit. Table 1: Internal audit training.

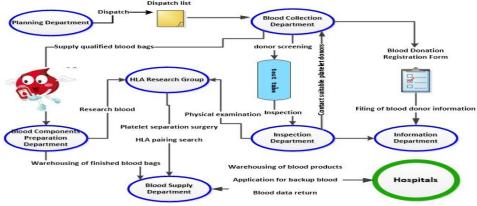


Fig. 3 Process oriented internal audit

Table 1. Internal audit training

Theme	Content	
Quality Management System	Administration, Resources, Product Implementation, Action.	
Management responsibilities	Management Engagement, Client Focus, Quality Policy, Planning Quality Objectives and Quality Management, Approval and Communication of Responsibilities, Management Review.	
Resource management	Provision of resources, skills, knowledge and training of human resources, infrastructure, working environment.	
Measure, analyze and improve.	Corporate planning, monitoring and measurement, non-conforming product control, data analysis and enhancement.	
Efficient internal audit requirements.	Seconded and independent, with professional skills, interpersonal and communication skills, and the importance and support of leadership.	
Auditor's professional ethics	Honest, objective, confidential and capable.	
Auditor's execution attitude	An attitude full of tact, With professional knowledge, A clear speech, A deliberate consideration, Honesty and no deceit, Good at communication, Without prejudice,  Observation of subtleties, Empathy with others, Diligence and perseverance, Impartiality and impartiality, Sensory sensitivity.	
Remedial actions and	Institutionalizes effective corrective measures, reports audit results to	
management system	management, regularly verifies if problems are repeated, adjusts audit	
implemented.	frequency and direction, and makes good use of audit results.	

# 3. The Nurse in Charge'S Roles and Attitudes

Frontline nurses at the Taichung Blood Donation Centre. Improve the overall image of the group, give a good impression to the blood donors, form a positive and positive reputation, and improve the visibility and social status of the unit. Improve the overall image of the group, give a good impression to the blood donors, form a positive and positive reputation, and improve the visibility and social status of the unit. Simultaneously promote sustainable improvement throughout the health system[11].

### 3.1 Produce a good first impression

Face to face with the blood donor for the first time when checking documentation. It is important for blood donors to create a first impression image without knowing anything about the personnel. Building the trust necessary at the first minute determines the continuity of the willingness to give blood regularly in the future. Friendliness, physical behaviour, questioning of etiquette, and the overall temperament of the medical and nursing profession of the chief nurse are therefore very important. To reach the goal of happy blood donation, safe blood use, personal development and lasting progress[12].

# 3.2 To achieve the goal of happy blood donation, safe blood use, personal development and sustained progress

The detection of blood donors depends on their voluntary and honest application of the information. The detection of blood donors depends on their voluntary and honest application of the information. If there is a situation of dishonesty, it is probably because of a lack of proper understanding of the blood donor incident. Blood donors may have different opinions and interpretations of certain correct behaviours, or may have overlooked them. To achieve the goal of ensuring the safety of blood, an efficient and timely system and high-quality blood tests are just as important as screening blood donor[13]s.

Maintaining humility and success is certainly not a question of multiple choices with two choices. Any time let go of your professional behavior, and be willing to communicate sincerely with people with lower qualifications or positions. While obtaining success, you may yet have a humble heart [14]. Figure 4. Physical examination interview.

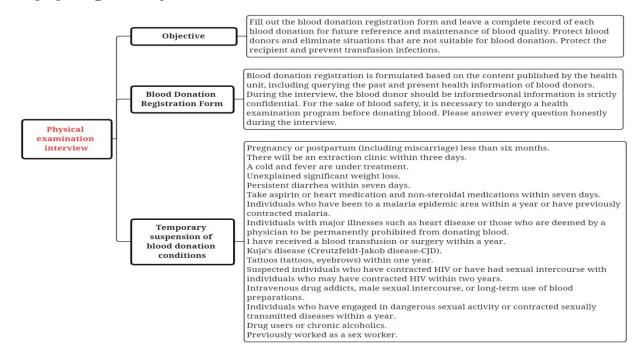


Fig. 4 Physical examination interview

# 4. Blood Measurement and Regular Equipment Calibration

Nurses must conduct regular internal inspections of all instruments and equipment and submit them to the National Board of Standards and Inspection for external calibration of unit standards. The qualified measuring equipment has to be labelled "OK" before use. Current instruments and equipment include COBE, HAMONETITCS, K-800, weights, scales, sphygmomanometers, ear temperature guns, Hermocue, blood fridge, centrifuge, platelet oscillator, blood bag sealing machine [15].

The donor confirms identity, measures blood pressure and uses the copper sulphate method to detect hemp that meets the standards for blood donation. Standard for haem measurement: Male 13gm/dl or above (blood density 1.054). Females whose blood density is greater than or equal to 1.052 mg/dl. Only individuals who meet the above criteria as part of a physical examination in person can donate their blood[16].

# 4.1 Blood cell analyzer and blood donor segregation technique

The blood cell analyzer can test the following items: WBC, DC, RBC, HGB, HCT, MCV, MCH, MCHC, RDW, Retics, PLT, MPV[17].

Seperation surgery of blood platelets for blood donation: This is a special method of blood donation. Extract donor blood, keep it in a sealed, sterile state, and automatically separate blood components such as platelets or plasma by using a blood separator. Other parts of the blood (mainly red blood cells and plasma) are immediately returned to the donor. After repeated operations, enough platelet components are obtained in the blood, which lengthens the time of blood donation. (Approximately 1.5-2 hours). Need to book appointment to use the centrifugation equipment[18].

### 4.2 Platelet collection equipment

Only then will we be able to provide this service. Currently, blood donation centres in Taiwan use three types of machinery for blood separation: Trima, Amicus, and MCS ED[19]. Table 2: Platelet collection equipment.

Table 2. Platelet collection equipment

Trima	Amicus	MCS+ED
The Trima Accel system	Equipped with a double guard. Collect	Collect with a bowl of
is a blood separation and	platelets to reduce adverse effects of	hard shell juicer. It serves
collection device which	transfusions and meet the requirements of	a platelet protection
uses centrifugal force to	clinical transfusion guidelines. Complete	function. At the time of
separate total blood into	transfusion of white blood cells to protect	collection, the demand for
platelets, plasma and red	lymphocyte levels and protect the health of	CDA is low. Single needle
blood cells (RBC).	blood donors. Triple saline infusion provides	collection. Low noise
Quickly separate blood	a comfortable experience of saline function	during operation.
components based on	before, during and after sampling, increases	Different blood
their density and	blood volume, and prevents and manages	components can be
morphology before	vagal nervous reactions throughout the	collected based on
sampling, and the	process. A broad spectrum of blood donors	different program charts
remaining blood	is equipped with estimators, accurate	(platelets, red blood cells,
components are safely	screening, and more appropriate for blood	PBMC, PBSC, etc.).
returned to the donor.	donors.	Passed CE and FDA
		international certification.

### 5. Conclusion

Extracting and sharing knowledge. Building an organization focused on learning and fostering the happy growth of colleagues. Act as chief nurse for blood donations or blood donation vehicles, with superior professional knowledge, accumulated experience and legacy. There is a pressing need to extract the experience of nursing experts and speed up the flow of medical knowledge. The Department of Blood Collection has put in place a video and audio promotion system for exemplary individuals who have donated blood many times over the years. Broaden the pure heart of bona fide blood donors and join the team of blood volunteers to expand blood donor services. Nursing chiefs need to create a happy work environment and atmosphere. After completing the job every day, provide professional feedback and case sharing for 5-10 minutes, and submit personal learning experiences about Cochrane courses each month. Driven by a learning oriented organization, each colleague can learn and share knowledge with each other, actively learn and seek knowledge, enhance their professional knowledge, combine practical work experience, train their logical thinking and medical skills, maintain the enthusiasm and technical level that medical staff should have, form a high-level knowledge flow, and provide the most suitable service to blood donors.

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