

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

” قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا عَلَّمْتَنَا
إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ “

البقرة - الآية: 32

New Trends in Community Health Nursing

By

Zainab Attia Abdallah

Lecturer of Community Health Nursing

Faculty of Nursing – Modern University for Technology and Information

2025

Outlines



Introduction

New Trends in Nursing Education

New Trends in Nursing Practice

New Trends in Nursing Research

Introduction

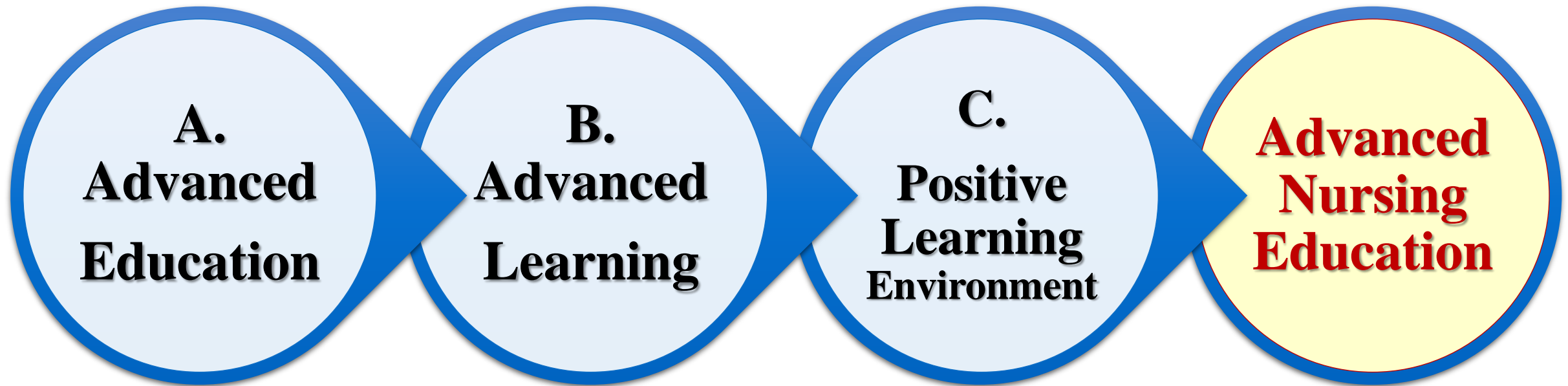
Community health nurses play a crucial role in accomplishing **Egypt Vision 2030** to provide a healthy, safe and secure life for all Egyptians. It will be achieved through an integrated, accessible, high-quality and universal healthcare system capable of improving health conditions through a preventive coverage and early intervention.



To achieve the excellence in community health nursing, nurses need to be up to dated of new trends in nursing, by applying innovation in **education, research, and practice** related to community health nursing services based on high quality and advanced technology.



New Trends in Nursing Education



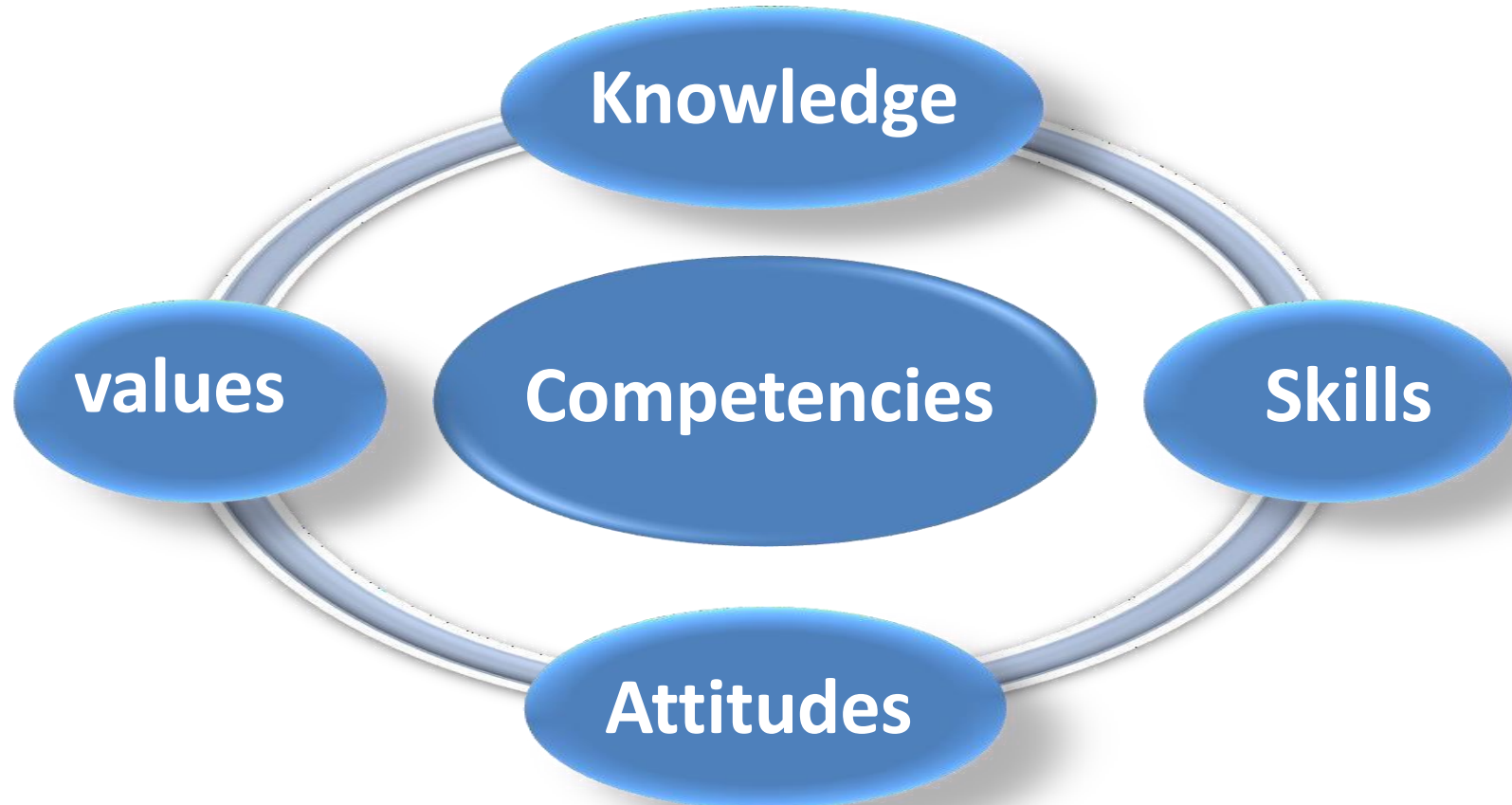
A. Strategies of Advanced Education

- Innovative Curriculum.
- Innovative Teaching Strategies & Evaluation Methods.
- Competency Based Education (CBE).



CBE

An outcomes-based approach to **design**, **implement** & **evaluate** **education programs** using an organizing framework of competencies.



**B. Innovative
Learning
Strategies**

**C. Positive
Learning
Environment**



Success ↑

Fishbowl

Jigsaw

Think Pair Share

Team-Pair-Solo

Metaverse/Virtual Reality

Web-learning platform

Pedagogy Strategy

Flipped Classroom

Hybrid Blended learning

Massive Open Online Courses

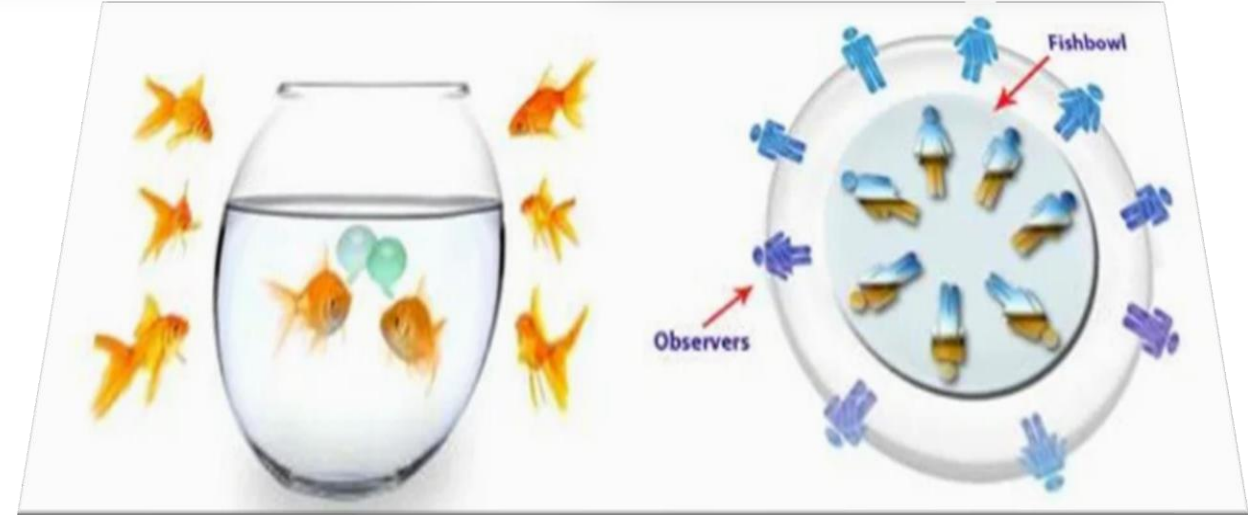
Jigsaw

Active Methods

Fishbowl



- An opportunity for students to teach each other.
- Each student is an essential piece of the jigsaw puzzle.
- When they work together, the puzzle is complete.



- Medium- to large-group discussions.
- Inner group (fishbowl) asks questions in a discussion.
- Outer group listens carefully to the discussion and take notes.

Flipped Classroom

Before the Class



The learners are given study material to read and assimilate the learning content.

In the Classroom



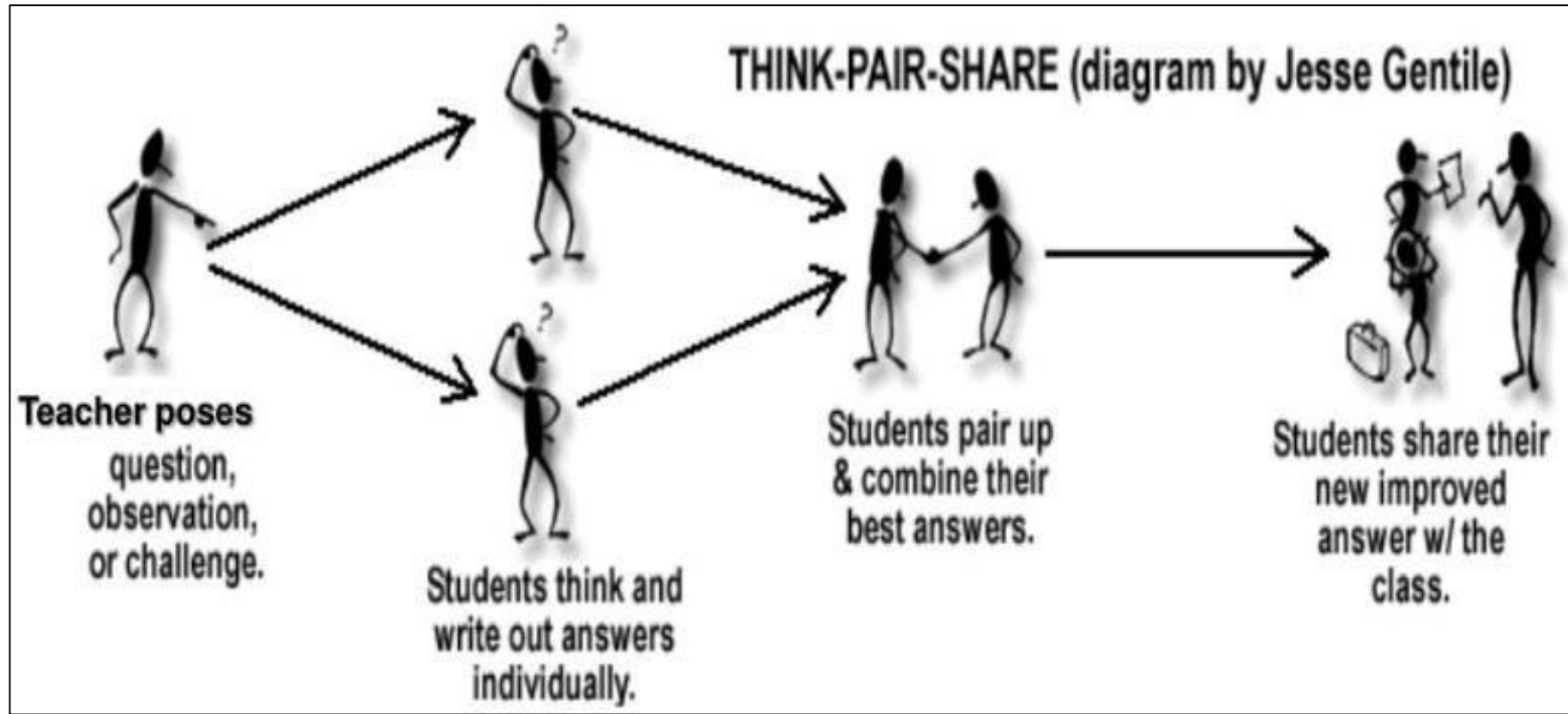
The learners discuss the content with their peers and the instructor.

After the Class



The learners check and confirm their understanding by doing further learning activities.

Think Pair Share (TPS)

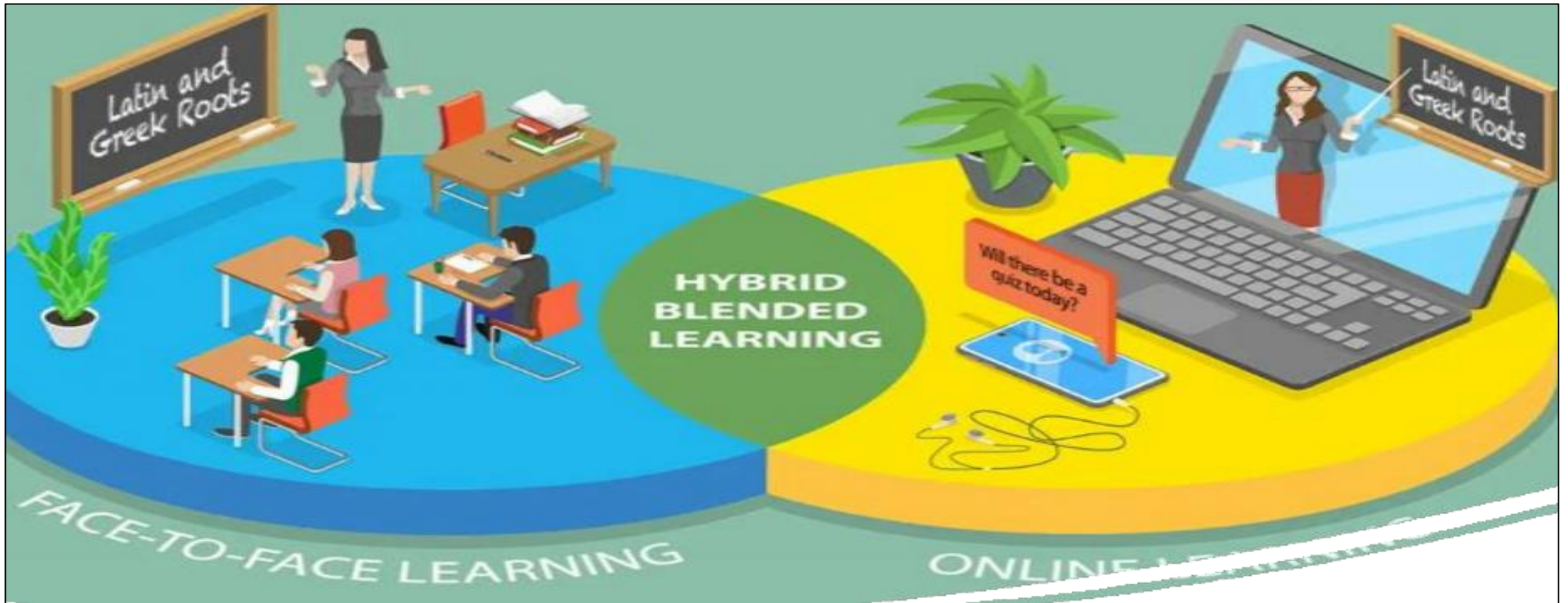


- **TEAM:** First, students work in teams.
- **PAIRS:** Pairs of students work together to solve a problem.
- **TEAM:** Student works alone to complete the task.

Team-Pair-Solo Strategy



Hybrid Blended learning

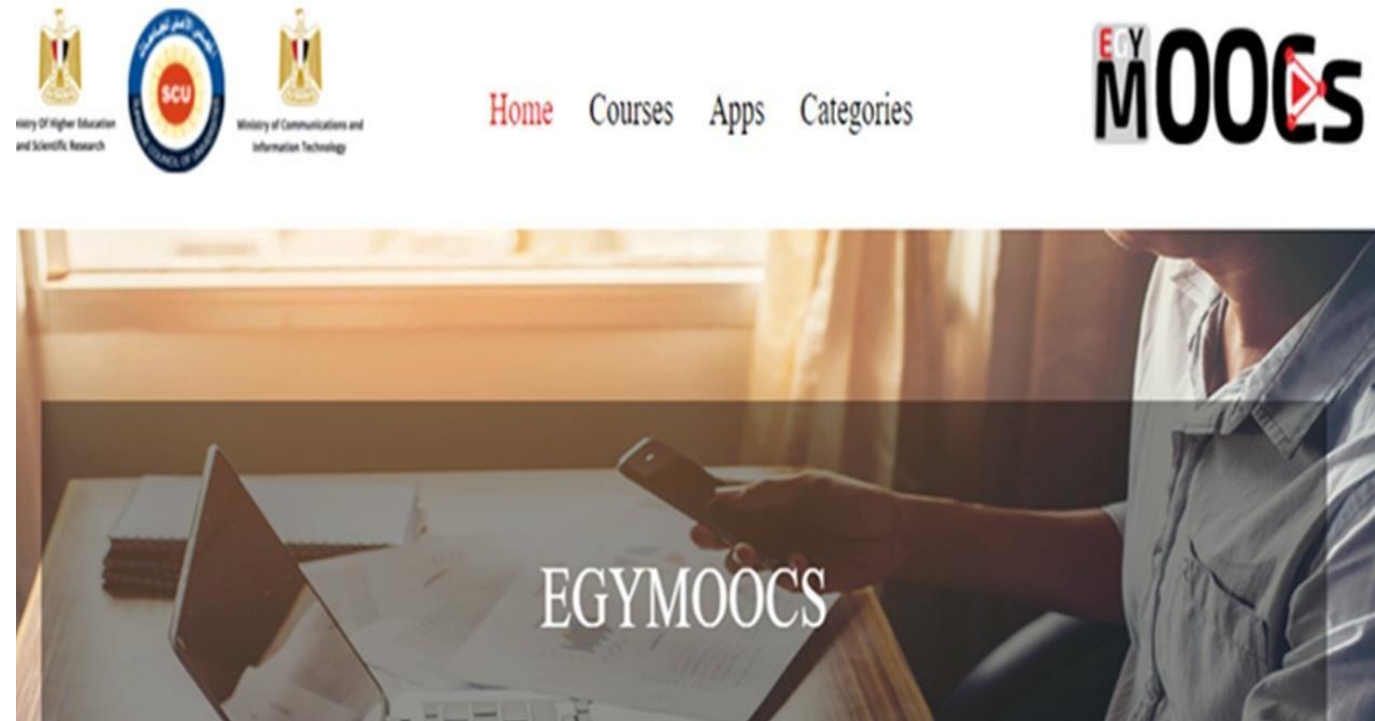


- It is the **integration of classroom face-to- face and online** learning experiences.
- Educators teach **remote** and **in-person students** at the **same time** using tools like **video conferencing**.

Massive Open Online Courses

- There may be +100,000 students in a MOOC.
- Anyone, anywhere can register for these courses.
- Coursework is delivered online.
- MOOC is very similar to most online college courses.

Web-learning platform



**Google
Classroom**



**Microsoft
Teams**



Metaverse



Metaverse is a virtual reality in healthcare by **combining (AI, VR, AR, Computing)** to find new directions in healthcare. **(3D)**

Virtual Reality (VR)



VR is a multi-sensory experience enabling a student to be present in a **simulated environment. (2D)**

Building a Positive Learning Environment

Understanding the Impact of Error Correction on Learning

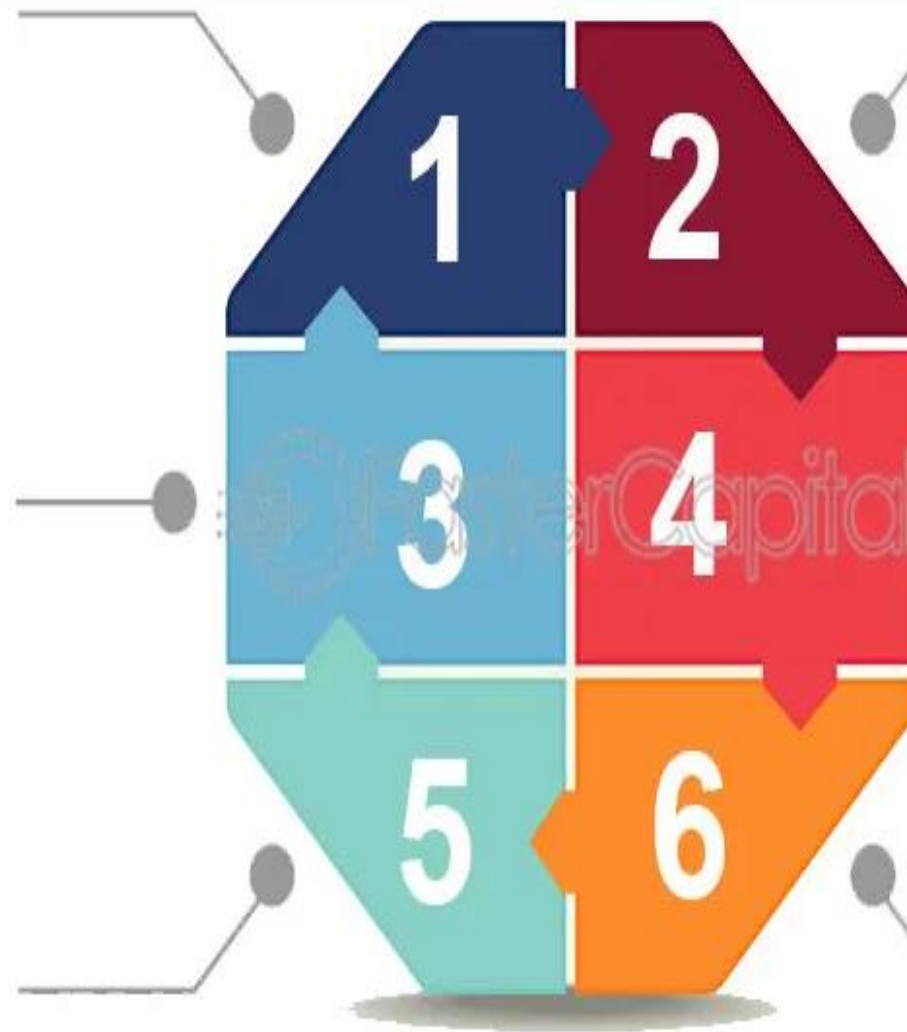
The Power of Positive Reinforcement

Providing Constructive Feedback

Emphasizing the Process Over the Outcome

Encouraging Peer Collaboration and Support

Balancing Error Correction with Autonomy




Use of Innovative Students' Assessment Methods



E-Rubrics



E-learning quizzes platform



Objective Structured Clinical Examination (OSCE)



E-portfolio

Pedagogy Strategy in Education



**IMPROVE CRITICAL
THINKING**



**RESPONSIBLE
CITYZENSHIP**



**PROBLEM
SOLVING**



**IMPROVE STUDENT
CREATIVITY**



**ETHICAL
DEVELOPMENT**



Student

IT CAN BOOST THE
QUALITY OF EDUCATION. IT
ALLOWS STUDENTS TO
TAKE FULL RESPONSIBILITY
FOR THEIR LEARNING.



Teacher

PEDAGOGY ENABLES
TEACHERS TO
UNDERSTAND THE BEST
SUITABLE PRACTICES FOR A
CLASSROOM SETTING.



New Trends in Community Nursing Practice



Primary Health Care (PHC)

Home Health Care

Maternal and Child Health (MCH)

Environmental Health

School Health

Occupational Health

Examples of New Trends in Egypt

New Trends in Community Nursing Practice

Primary Health Care (PHC)

**From Alma-Ata to Astana: Primary health care
reflecting on the past, transforming for the future....**



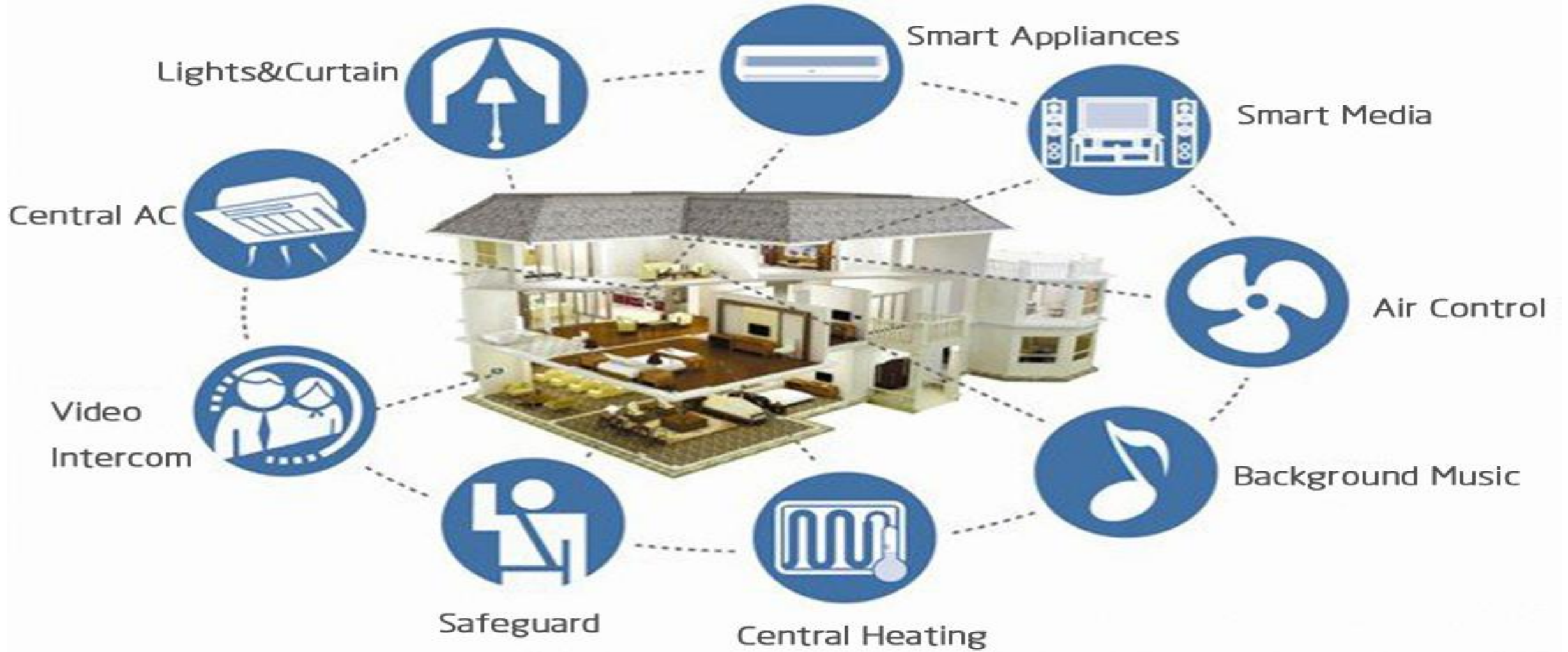
The 40th anniversary

The worldwide **Community Health Improvement Plan (CHIP)** identified these strategies with the **priorities of application.**

Sustainable Development Goals



Smart Home Care



Technology is revolutionizing home care, **making it more efficient and accessible.**

Infrared Laser Light Blood Glucose Monitoring



Flash Glucose Monitoring



Non-Invasive Blood Glucose Sensor

Advanced Workforce Management Solutions

Technology, AI in home care and automation in home care can help in repetitive tasks with high quality.



Caregiver Skills & Training

The demand for **highly skilled caregivers** is rising rapidly, specially for **individuals with disabilities**.



Telenursing in PHC

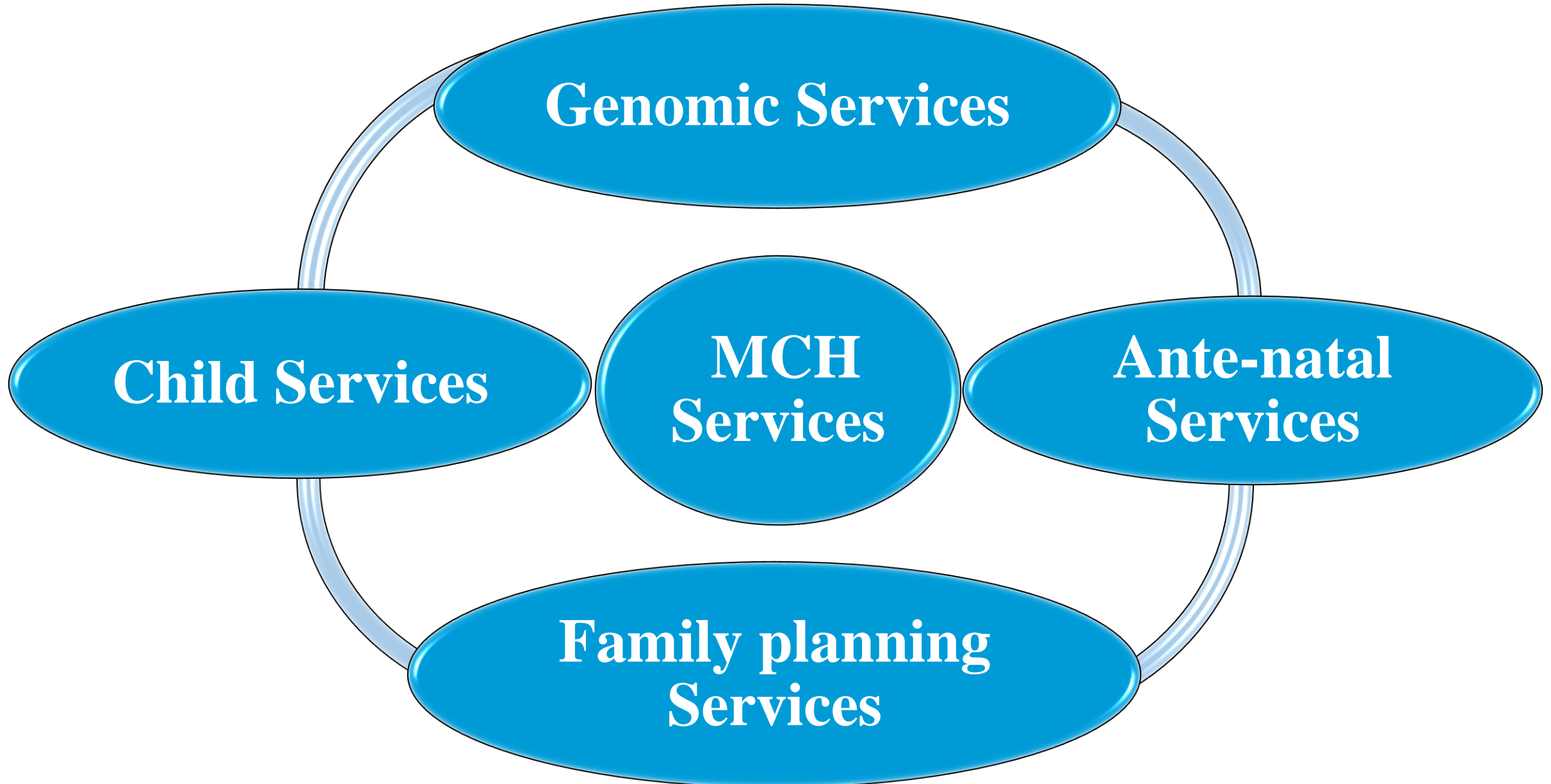
Telenursing Models

- Home care.
- Telephone triage.
- Case management.
- Chronic disease management.
- Pregnancy and newborn monitoring and care.
- Pre-postoperative patient care.
- Mental health.

Attia Abdallah, Z., Abdel Rahman Khamis, E., M. Ibrahim, F., & Allah Wagdy Farag, A. (2024). Telenursing Future in Solving the Nursing Global Workforce Gap. IntechOpen. doi: 10.5772/intechopen.110745



New Trends in MCH



Genomic Services

- The **Global Genomics Nursing Alliance (G2NA)**, established in 2017 in Australia, serves in advancing and integrating genomics into nursing practice.
- The **American Nurses Association (ANA)** in 2020 reported 11 new job description in nursing genomics through different specialties.



Awareness Program Regarding BRCA1 & BRCA2 Genetic Test for Early Detection of Breast Cancer among At-risk Women

Zainab Attia Abdallah, Engy Abdelrahman Khamis, Nagwa Ibrahim El-Feshawy, Ayiat Allah Wagdy Farag

Ante-natal Services

Hand-held Ultrasound for Maternal and Fetal Health

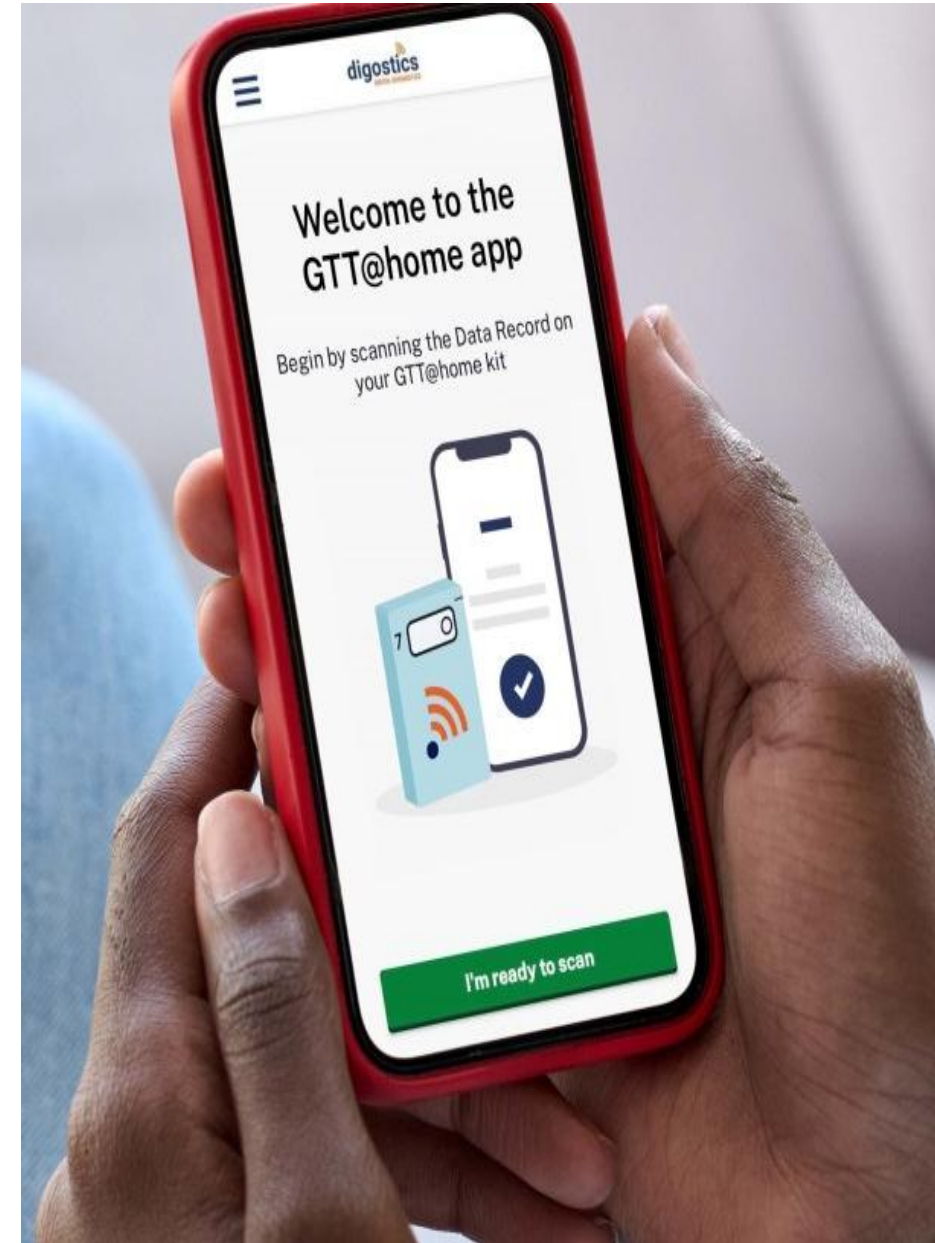


Wireless Fetal monitor



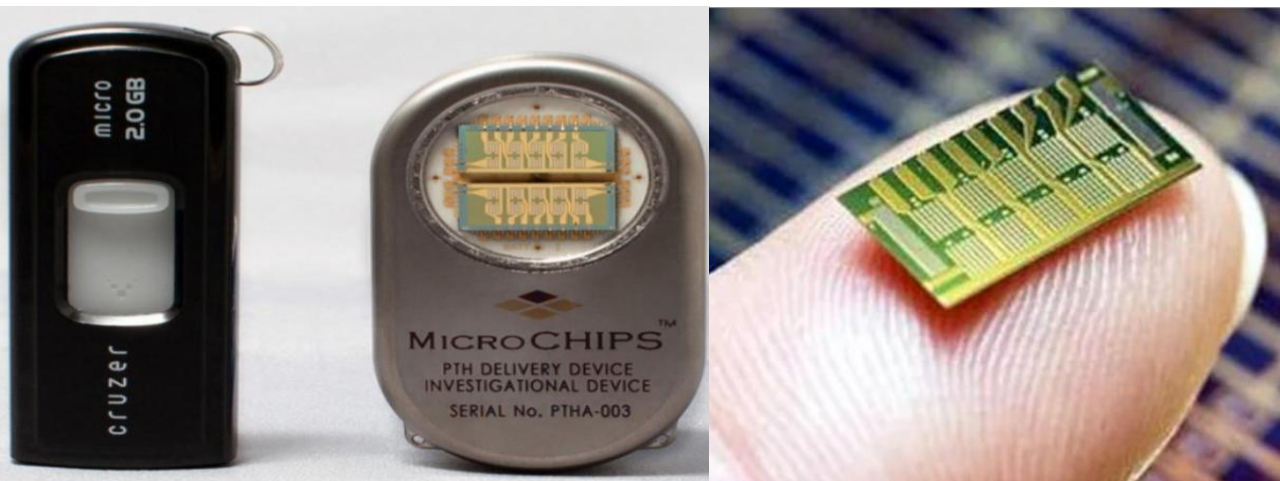
Home Testing Blood Glucose (Gestational Diabetes)

- An **app** that helps pregnant women better control blood glucose.
- The **two-year clinical trial** run by **Singapore's** National University Hospital is the largest in the world to use mobile technology to support women with gestational diabetes.



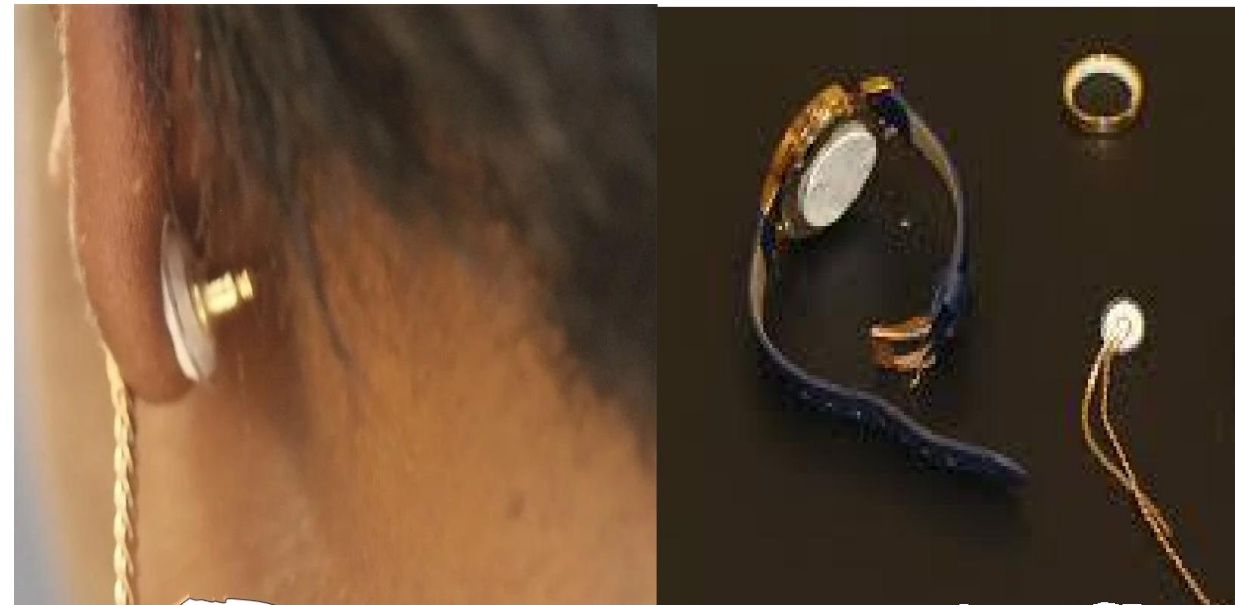
Family planning Services

Remote-controlled Contraceptive Chip



A tiny chip **implanted under the woman's skin** can deliver hormonal birth control for up to **16 years**.

Contraceptive Jewelry



Adding **contraceptive patches to necklaces, earrings, wristwatches and rings**

Grace to Manage Menopausal Symptoms



- It **reduces body heat** via a localized cooling mechanism at the wrist.
- This mechanism **alleviates night flushes**.

Smart Bra for Breast Cancer Screening



- **Check breast status** daily.
- Detect early stage of BC.
- Help in self-examination.

Bioidentical Hormone Replacement Therapy (BHRT)

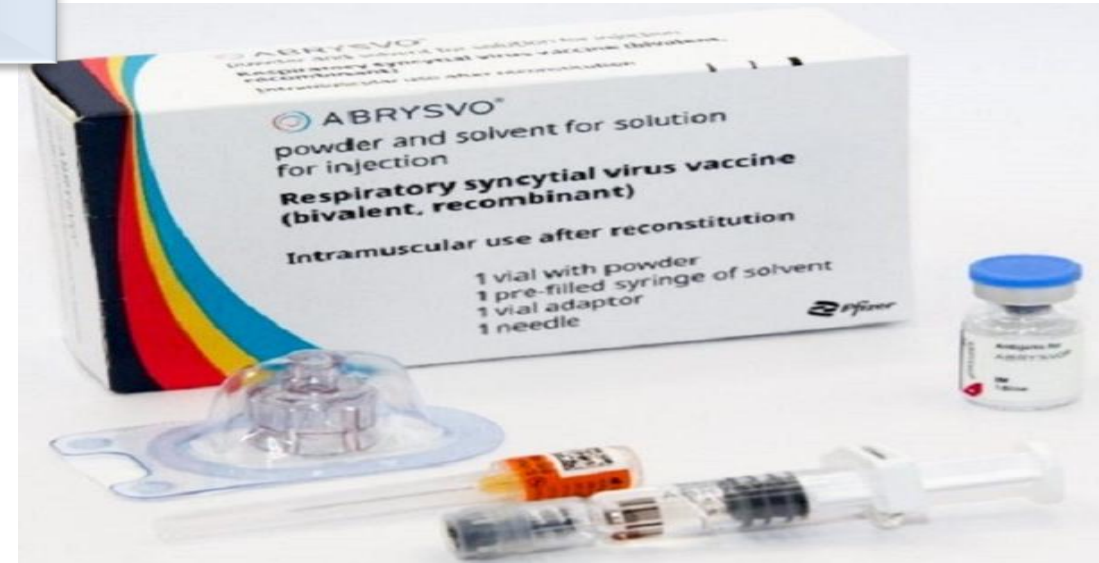
BHRT is a medical treatment involves replacing hormones in the body with substances chemically identical to our body natural hormones. They are often derived from plant sources such as soy and yams. They are processed similar to the hormones (e.g., estrogen, progesterone, and testosterone) produced in the human body.



Respiratory Syncytial Virus (RSV) (Bronchiolitis)

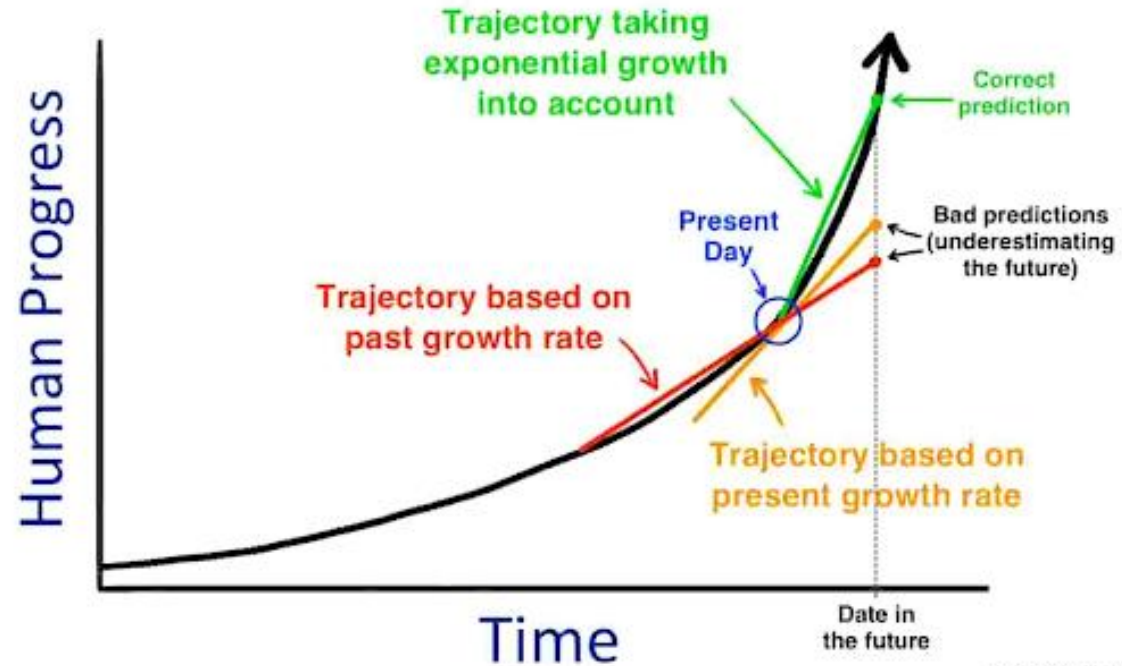
Child Services

- From 1 September 2024, pregnant women can have a **vaccine in the third trimester**, to protect babies against respiratory syncytial virus (RSV).
- RSV can cause **bronchiolitis** which make babies hard to breathe or feed.
- It **reduces the risk of severe bronchiolitis by 70% in the first 6 months** of life.



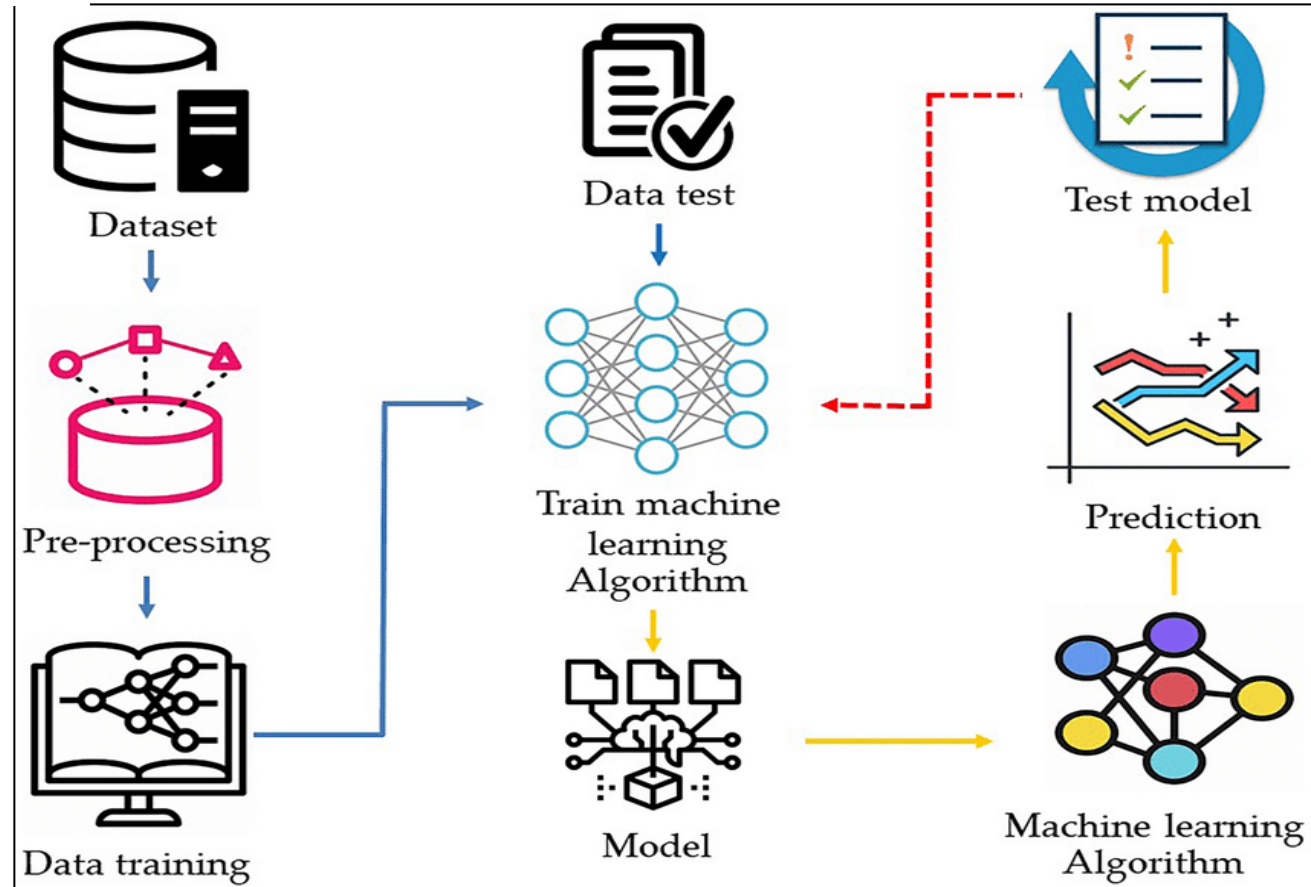
Growth Trajectory Forecasting

Long Short-Term Memory



Forecast **future BMI** and detect deviations from normal trajectory.

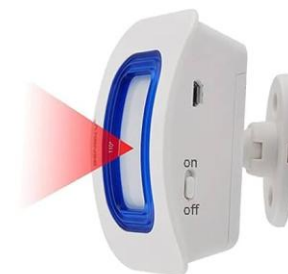
Machine Learning & Electronic Health Records



- Alerts for **growth faltering**.
- Integration into **mobile apps**.

Trends & Predictions in Elderly Care

- Automatic Fall Detector (**Elderly fall alarm**).
- Motion sensor systems for **unusual movements** / falls.
- **Caregiver pager** motion sensor.



في برنامج الرعاية الصحية لكبار السن

يتم الكشف عن

الأمراض المزمنة
(ارتفاع ضغط الدم - السكر - أمراض القلب
للاعتلال الكلوي)

الاضطرابات النفسية والعصبية
(الاكتئاب - ضعف المهارات المعرفية
والإدراكية)

أمراض الجهاز الهضمي

أمراض سوء التغذية



مبادرة الألف يوم الذهبية:

85% من قدرات الإنسان تُحدّد في هذه المرحلة
الحاسمة.. وتأثيرها يستمر مدى الحياة



الألف يوم الذهبية.. ما هي؟

تبدأ من فترة الحمل حتى إتمام الطفل
عامه الثاني، وهي فترة حرجية تؤثر
على صحة الطفل مدى الحياة.

تتكون الألف
يوم الذهبية
من
1000
270 يومًا
داخل الرحم
730 يومًا
من الولادة
حتى عمر
سنتين

لماذا تُسمى "بالذهبية"؟

لأنها تُحدّد 85% من قدرات الإنسان الذهنية، والنفسية، والجسمانية،
والصحية، والمجتمعية.

55%

من قدرات الطفل تتكون
خلال أول سنتين
من عمره.

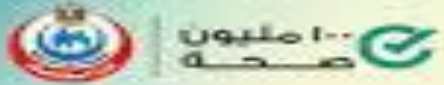
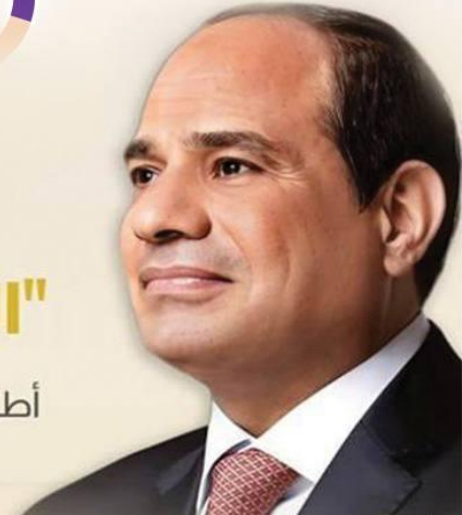
30%

من قدرات الطفل
تتكون داخل رحم الأم.

مبادرة

"الألف يوم الذهبية"

أطلقها رئيس الجمهورية بتاريخ 22 أغسطس 2023



100 مليون
صحة

مبادرة رئيس الجمهورية
للكشف المبكر وعلاج
الأورام السرطانية



مبادرة رئيس الجمهورية

للكشف المبكر وعلاج
الأورام السرطانية

تضم أورام

البروستاتا



الرئة



عنق الرحم



القولون



الكشف المبكر يساعد على زيادة نسب الشفاء

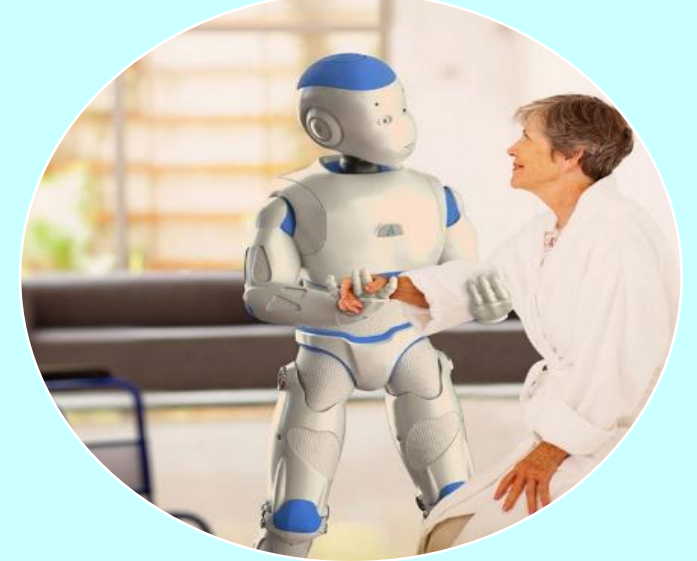
Robots



**Persuasive Robotics
(Coaches Robots)**
for motivating a
healthy living, diet or
exercise



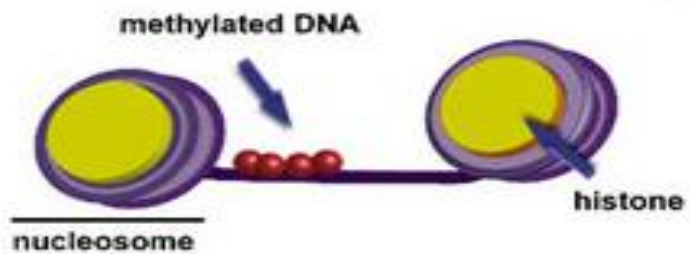
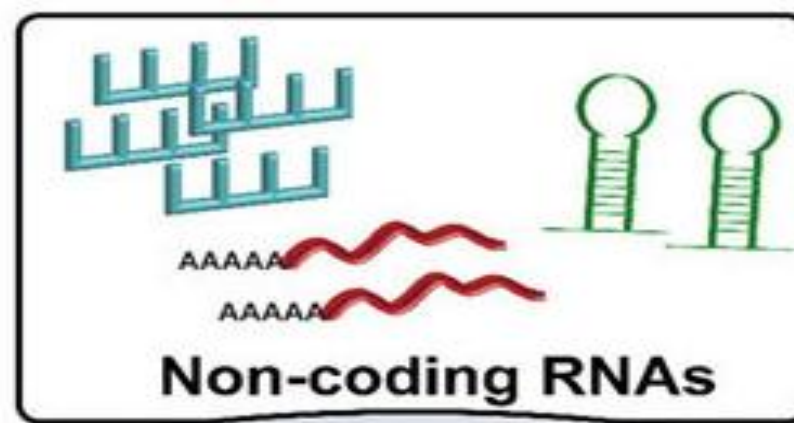
Humanoid Robots
for Entertaining,
Educating and
Improving the
Communication Skills
of Children with
Special Needs



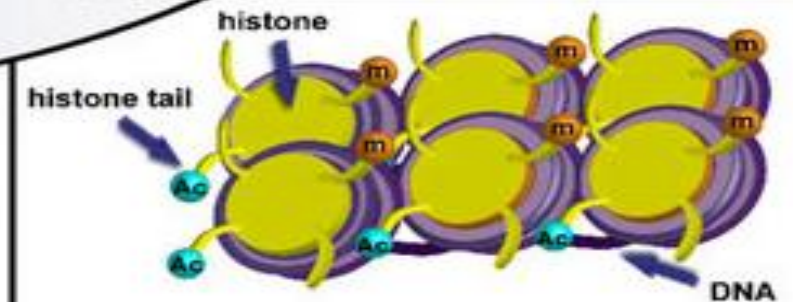
**Home Assistance
Robots**
for an Ageing Society

Epigenetics in Nursing

New Trend in Environmental Health



DNA methylation

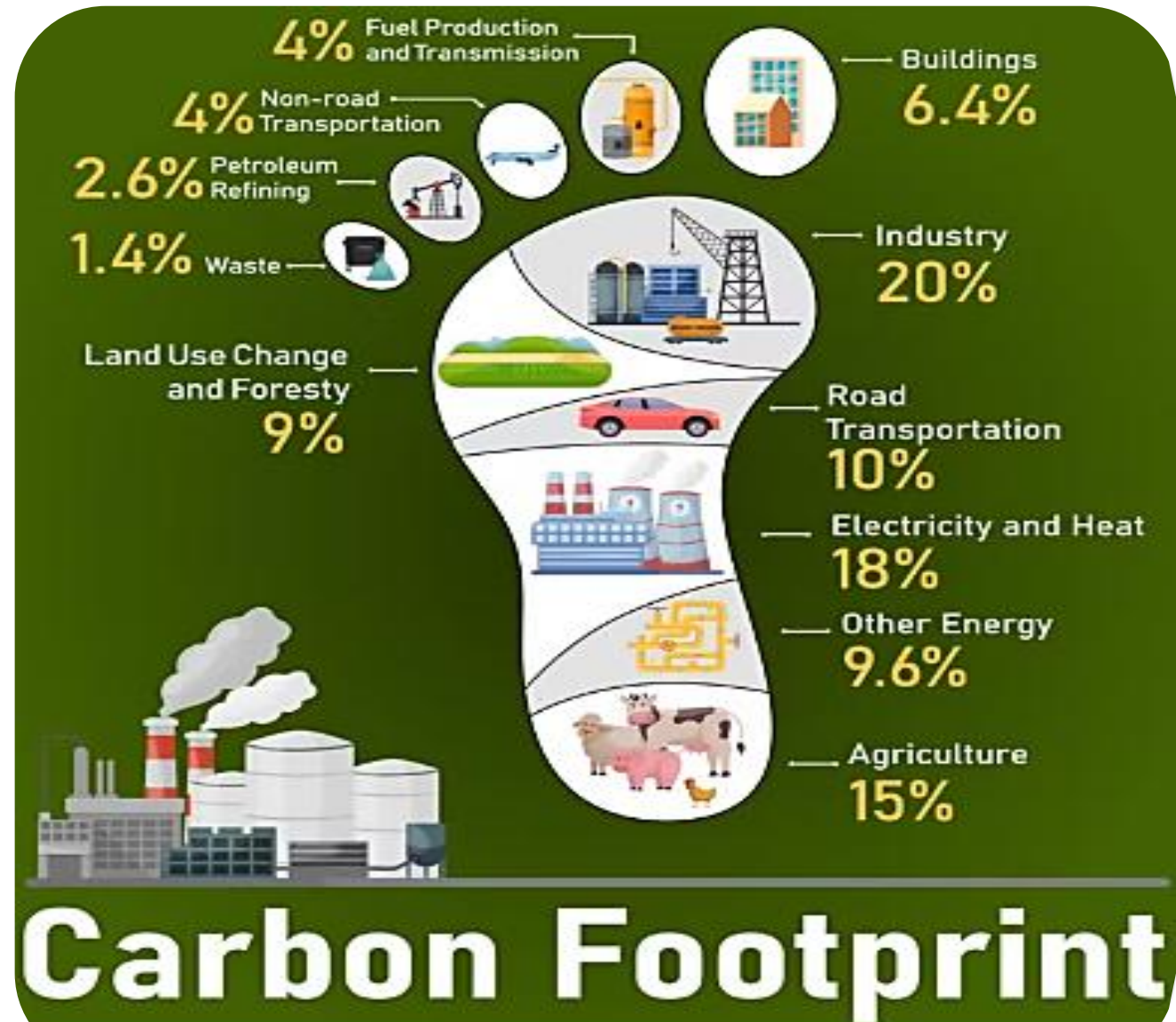


Histone modifications

Green School Program



Green Health & Economy



New Trends in School Health

Net-Zero Energy School Focus on sustainability

- A zero-energy schools produce **clean & renewable resources** of energy (such as **solar**).
- Zero energy schools can use between **65%–80% less energy** than other schools.
- The **remaining energy** required is supplied by **renewable energy**.





New Trends in Occupational Health and Safety

Employees Innovative Training



Remote & Hybrid Work Safety



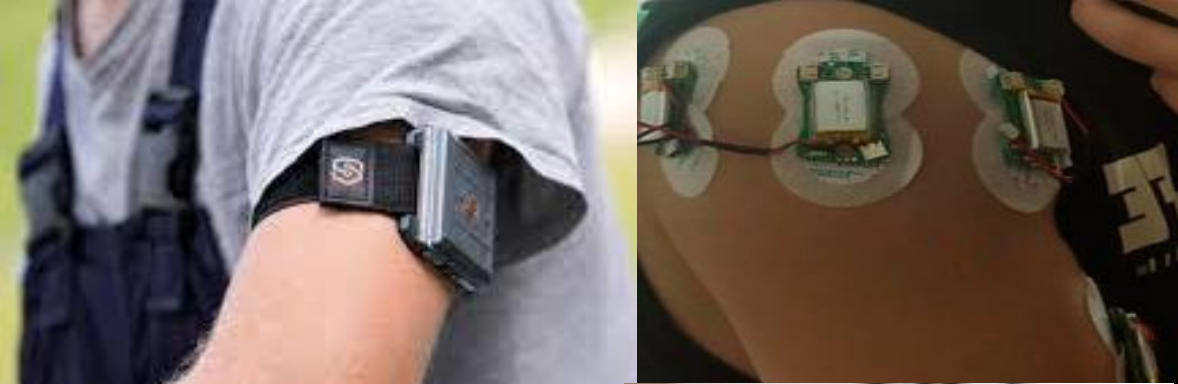
Virtual Reality (VR) and Augmented Reality (AR)

Workers can engage with virtual (VR) or augmented (AR) worlds which respond to their actions in real time. The result is **a deeply memorable, hands-on environment** that bolsters knowledge retention and boosts **overall skill development**.



Wearable Sensors for More Safety

Wearable devices with AI Reducing Injuries & Risk



Detecting **heat, radiation, heavy metals, hazardous chemicals & harmful toxins.**



Smart Finger



Smart Glasses



Smart Watch



Smart Pants



Smart Shoes



Smart Shirt



Smart Bracelet



Smart Belt



Smart Socks

Exoskeletons

Exosuits equipped with stabilization systems can do the following for your employees:

- Enhance balance and stability
- Reduce the likelihood of falls
- Improve worker safety

62%

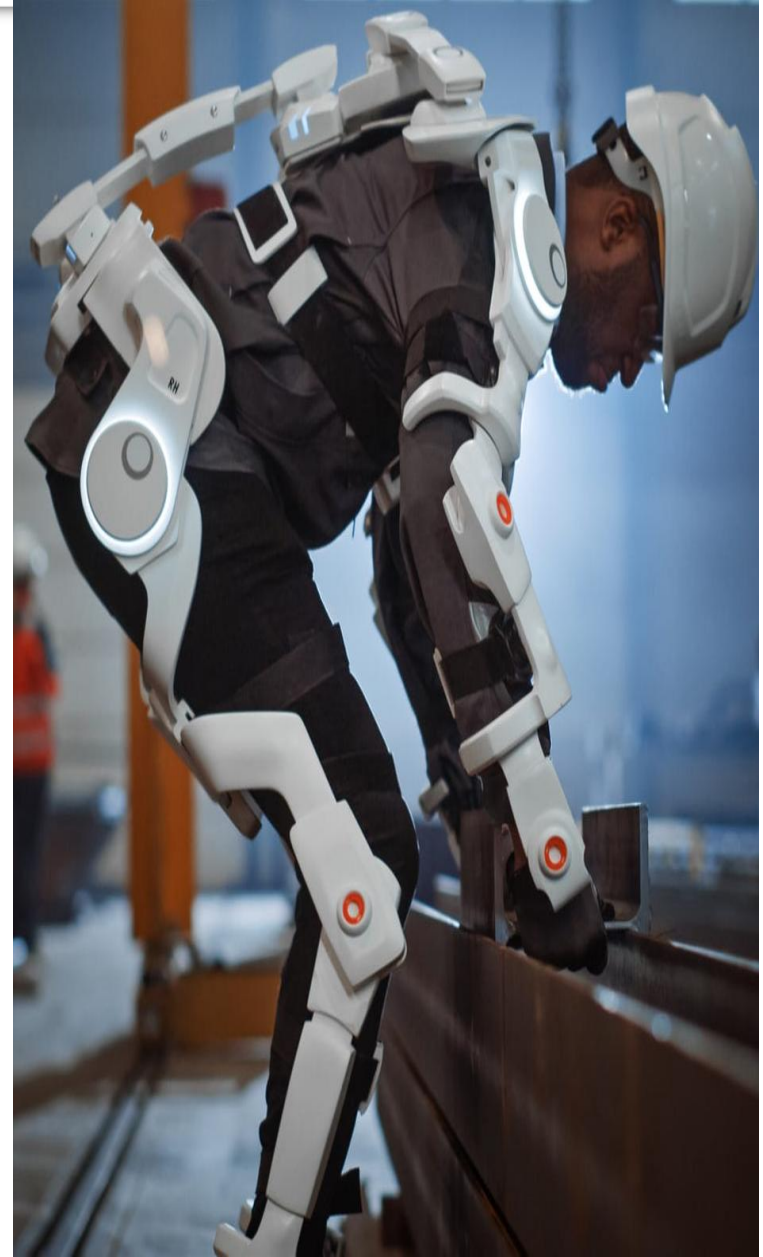
say they'd be more productive.

70%

say it would make their work easier.

84%

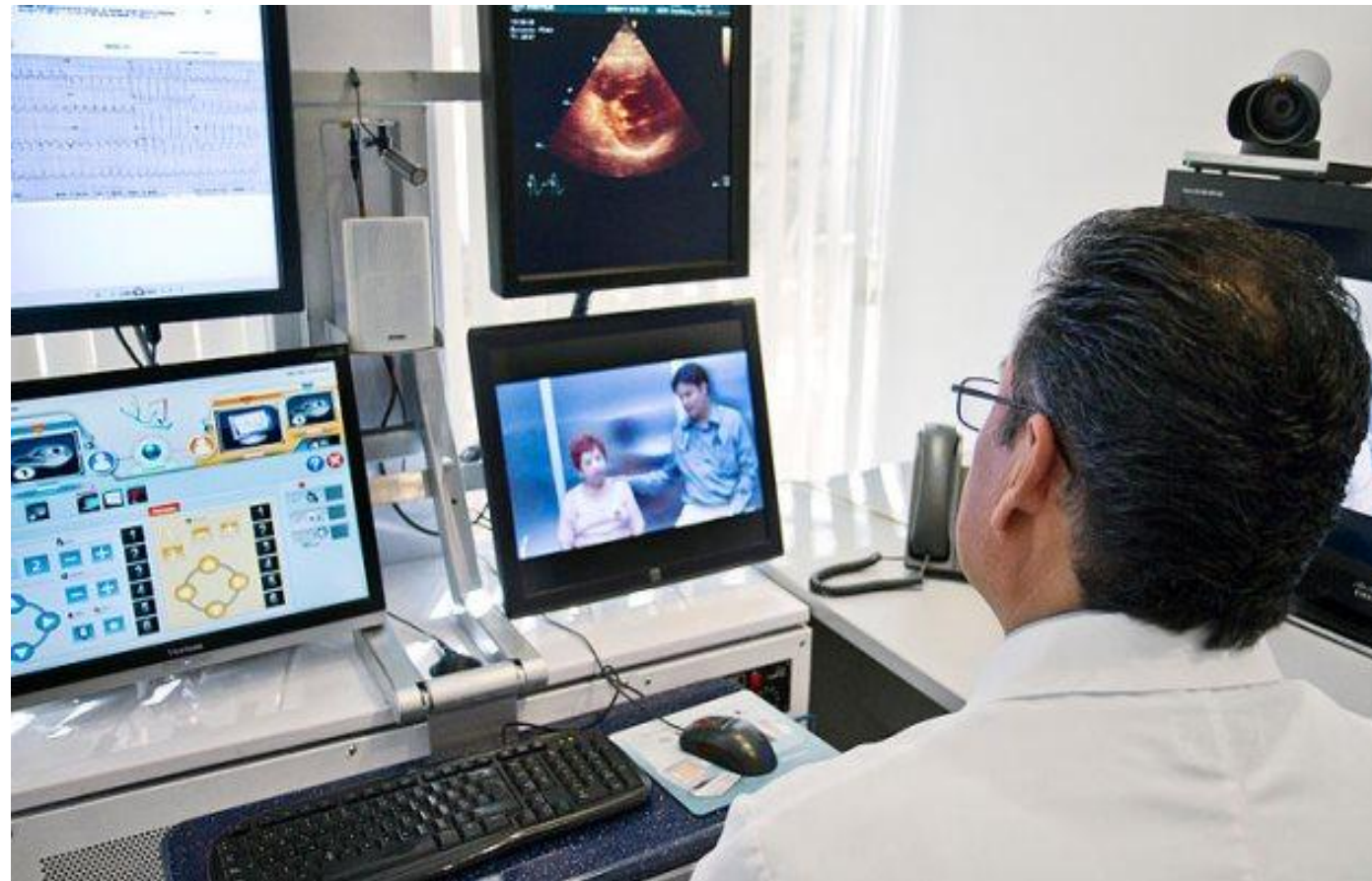
believed exoskeletons would be beneficial for their jobs.



Examples of New Trends in Egypt

Applying of Telemedicine Services in Health Insurance System in Egypt

A new online **application** called **“Al-Balto”** to provide medical care in 8 specializations of **pediatrics, obstetrics and gynecology, psychology, nutrition, dermatology and venereology disease**, in Arabic and English.



Robotic Nursing in Egypt

“Shams”

**The first robotic nurse in Egypt
During COVID 19**

- Collect patient data.
- Assist in caring for patients with infectious disease.
- Lift and move patients.
- Take vital signs.
- Give medications.



Students' Project in MTI University, Faculty of Nursing

Virtual Home Visit



It is a **simulated home environment (2D)** to offer a potential solution to the problem of **limited opportunities for real home visit.**



Emergency Bracelet for Elderly

New Trends in Nursing Research



Evidence-Based Research

Evidence-based practice (EBP) is a **problem-solving approach** that integrates the best research evidence, clinical expertise and patient values and preferences in making decisions about a patient's care.



Interdisciplinary Nursing Research

It is **communication & collaboration** between researchers across academic disciplines to achieve outcomes that could not be achieved within a single discipline.

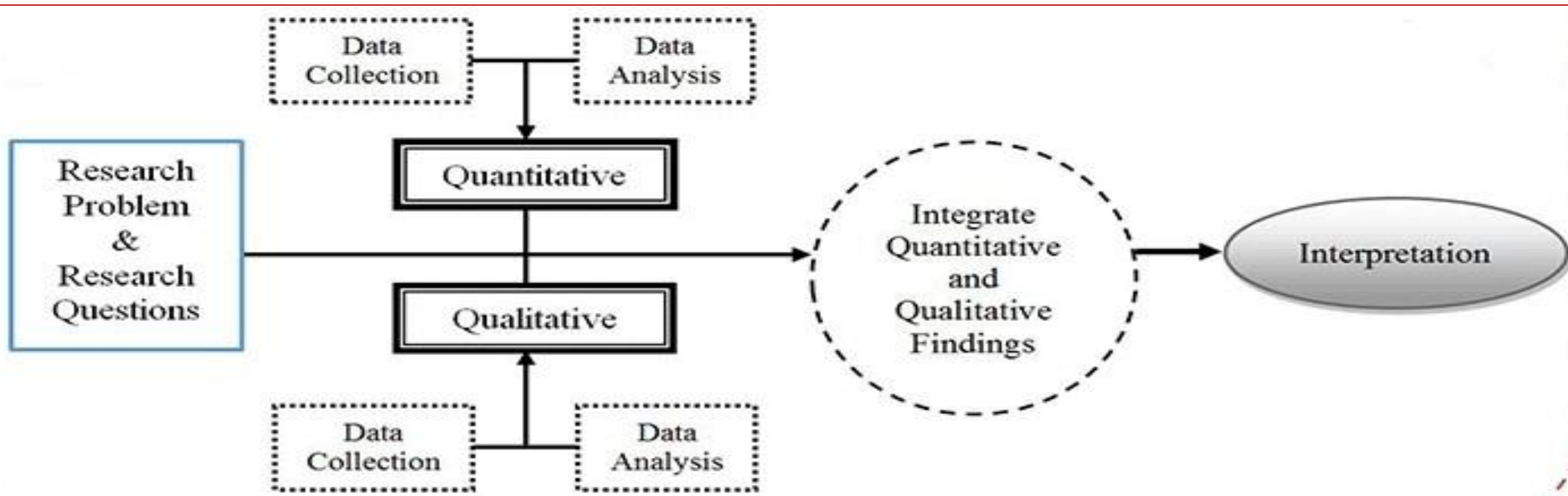


Awareness program for controlling the misuse of antibiotics and related resistance among mothers of children under 5 years

Abdallah, Z.A., Hamid, T.H.A., Zaghlool, S.S. *et al.* Awareness program for controlling the misuse of antibiotics and related resistance among mothers of children under 5 years. *J Health Popul Nutr* **44**, 115 (**2025**). <https://doi.org/10.1186/s41043-025-00823-4>

Mixed Method Research

Also known a **hybrid method research**, it involves integrating or combining both quantitative and qualitative research approaches within a single research study to understand a phenomenon better and answer the research questions.



Systematic Review & Meta-analysis

Should be conducted in context of a systematic review

although not required

Quantitative

Heterogeneity is acceptable

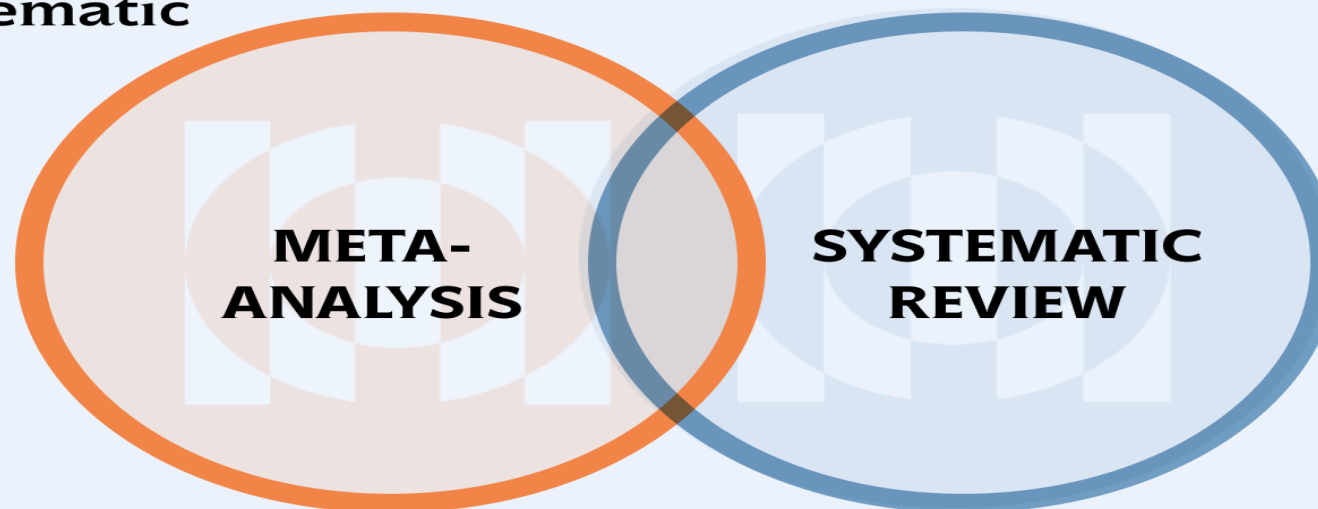
- a meta-analysis can address the heterogeneity in the study

Does not need a meta-analysis

but can include one

Qualitative or quantitative






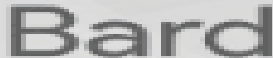



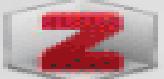














Studies can be heterogeneous



Steps in a systematic review



Advanced Research Tools

Literature Search	 Elicit	 Connected Papers	 Research Rabbit
Writing Assistants	 ChatGPT	 WordTune	 Bard
Grammar & paraphrasing	 Quillbot	 PaperPal	 Grammarly
Citations	 Zotero	 Mendeley	 JabRef
Illustrations	 Canva	 BioRender	 Draw.io
Data (Quantitative)	 R	 SPSS	 JASP
Data (Qualitative)	 ATLAS.ti	 Nvivo	 Otter
Productivity	 Trello	 Notion	 Pomofocus

Nursing Research HUB

Develop research skills through:

- Education sessions and workshops.
- Promotion of nurse-led research.
- Research training opportunities.



Zainab Attia Abdallah
Lecturer of community health nursing
ليس هناك بريد إلكتروني تم التحقق منه
Community health nursing

Impact of awareness program regarding health consequences of climate change on knowledge, perception and daily life practices among nursing students
ZA Abdallah, AA Wagdy Farag
Egyptian Journal of Nursing and Health Sciences 3 (1), 367-390

Telenursing Future in Solving the Nursing Global Workforce Gap
ZA Abdallah, EAR Khamis, FM Ibrahim, AAW Farag
Nursing-Trends and Developments

VCCC Alliance

Nurse-led Research Hub
For nurses working with people affected by cancer

Grow clinical research skills through networking and education

A graphic with a central lightbulb icon. Surrounding the lightbulb are several icons: a speech bubble, a group of people, a laptop with a Wi-Fi symbol, and an open book. The background is a solid blue color.

Nursing Research Partnership

Assessing the Mental and Behavioral Difficulties of Deaf and Hard-of-Hearing Children in Egypt: A Multicenter Study

Data Sharing Agreement

It's a research partnership protocol between School of Public Health, **Pittsburg University** and Faculty of Nursing, **MTI University**, 2025

النشر الدولي للأبحاث العلمية

بتعاون مع

بنك المعرفة المصري

و

SPRINGER NATURE



Recent Research Studies

Effectiveness of Smart Mama application on postpartum depression, anxiety, and maternal-infant bonding among women during the postnatal period: a randomized controlled trial (Osman et al., 2025)

This **prospective parallel-group randomized controlled trial** included 148 participants from March 1, 2023, to March 31, 2024.

The Smart Mama intervention significantly reduced postpartum depressive symptoms and anxiety. This study provides empirical evidence and novel insights into the effectiveness of mobile device applications. By integrating a holistic approach, **Smart Mama represents a promising and innovative solution for enhancing maternal health outcomes, empowering self-care activities, and overcoming barriers to accessibility.**

Login with the password

SMART MAMA

Please change your password

Reason of change: You logged in with a temporary password

Rules for Password Change

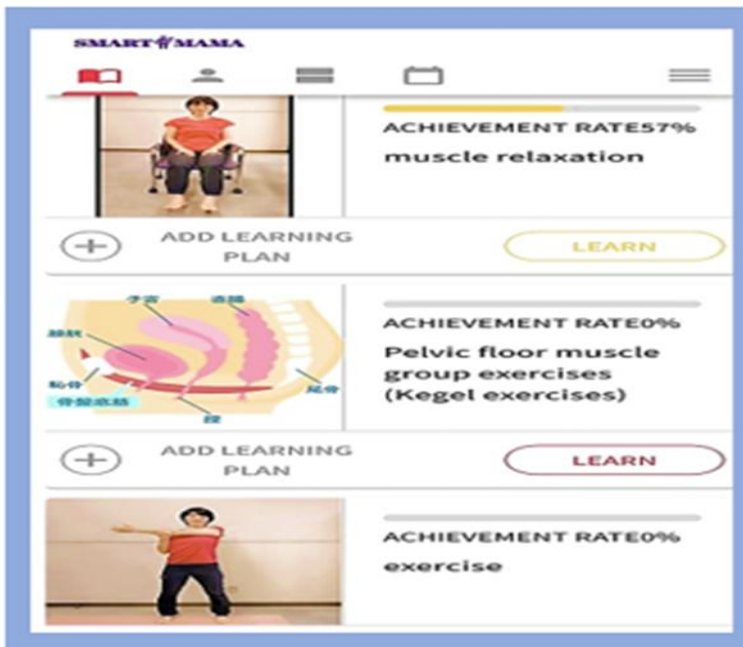
- 5 or more characters
- 50 characters or less
- Can not include login ID
- Should be different from previous

New Password

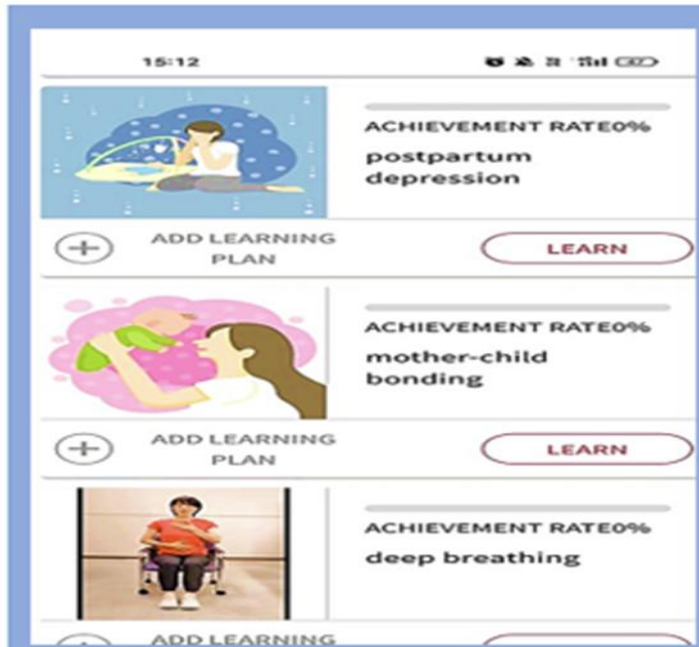
New Password (Confirm)

CHANGE PASSWORD

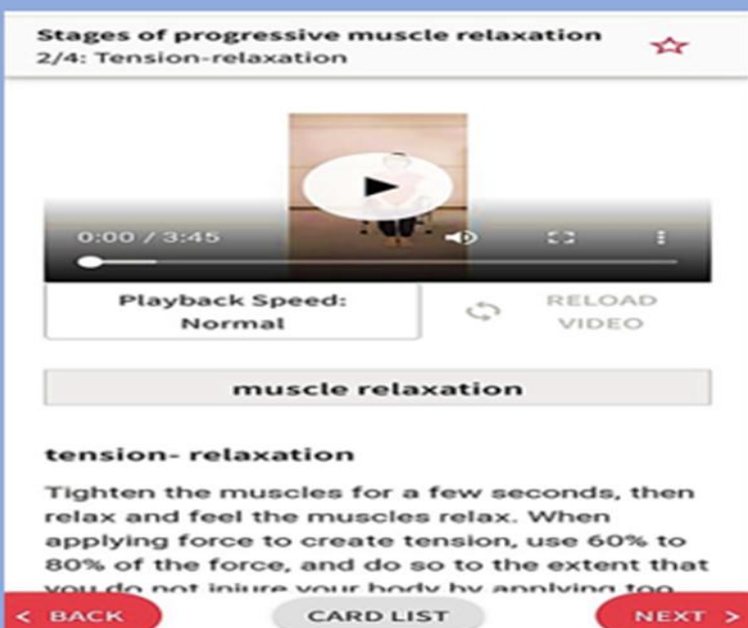
Click "Open module list"



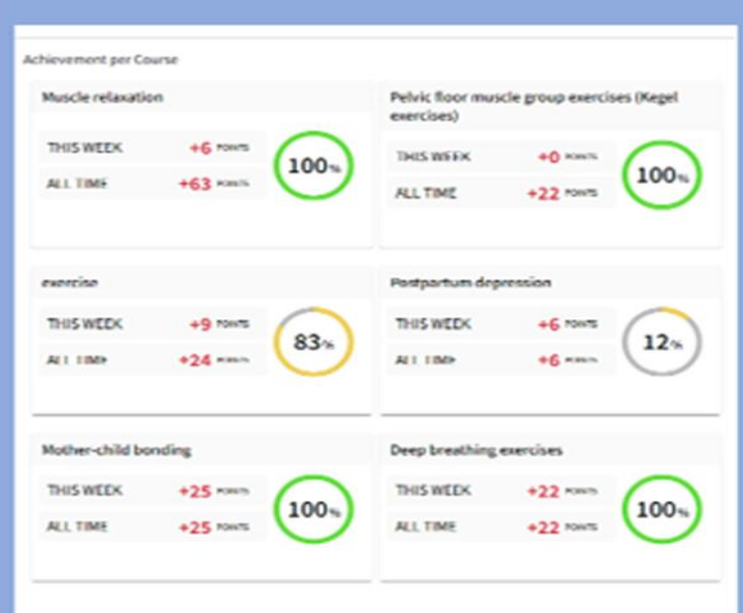
Click "Learn" for the part you like



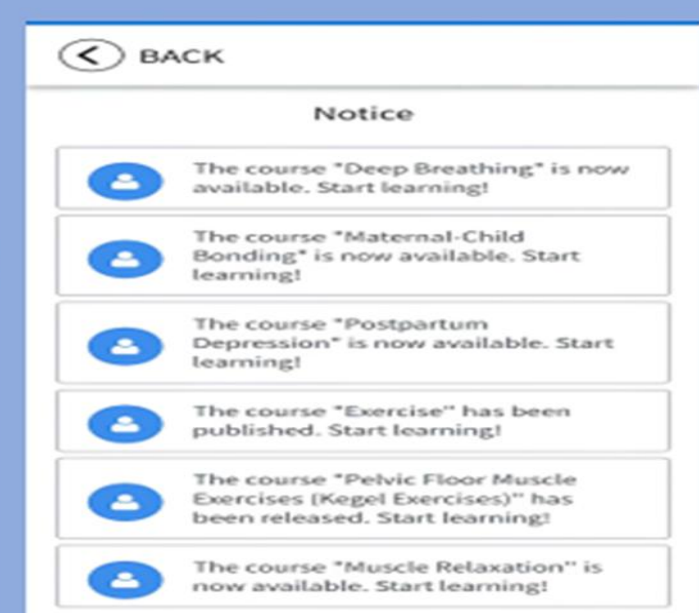
watch the videos for each part



You can check your progress



Notification for each module



Effectiveness of virtual clinical learning in nursing education: a systematic review (Alsharari et al., 2025).

- This systematic review was conducted in accordance with the **PRISMA guidelines** of systematic reviews and Meta-Analysis.
- Experimental peer-reviewed articles (**randomized controlled trials, and quasi-experimental studies with one to two or more groups (pre-/post-test)** using e-simulation technology for nursing education) were included.
- **PubMed, Embase, PsycINFO and Web of Science were searched.**
- This study examines the effectiveness of virtual simulation technologies on the primary outcomes of communication and problem solving and the secondary outcomes of core professional competencies and the nursing process.

Results

- Virtual simulation technologies could be used for the practical teaching of nursing students. These technologies have been shown to significantly **improve problem-solving skills** (effect size 0.2 to 0.9), **communication skills** (effect size 0.4–0.7), and core **professional competencies** (effect size 0.3 to 0.9) with a small to large effect size.

Conclusion

- The results indicate that **virtual simulation technologies** have **important benefits** for students' learning when integrated into **clinical nursing education and practice**. Also adapting this approach could help improve student **readiness for effective healthcare delivery**.



حصاد التصنيف الدولي لعام 2024

تطور غير مسبوق في التصنيف الدولي للجامعات المصرية

دائرة العامة للمكتب الإعلامي
والمحدث الرسمي

تصدر الدوريات العلمية المصرية النشر
الدولي عربيا في تصنيف كلاريفيت

14
جامعة مصرية

ضمن أفضل
مائة جامعة
عربيا بتصنيف
QS للبلاد العربية

4
جامعات مصرية

ضمن
أفضل مائة جامعة
على مستوى العالم
بتصنيف التايمز
للتخصصات البينية

81 مؤسسة تعليمية مصرية في تصنيف ويبومتر كس العام

69 من الجامعات المصرية والمراكز البحثية ضمن تصنيف سيماجو العالمي

51 جامعة مصرية في تصنيف ويبومتر كس للاستشهادات المرجعية

46 جامعة في تصنيف التايمز البريطاني للتنمية المستدامة

27 جامعة في تصنيف US News

15 جامعة في تصنيف Leiden

15 جامعة في تصنيف QS العالمي

8 جامعات في تصنيف شنغهاي

57 مجلة مصرية في تصنيف كلاريفيت

*Thank
you*

