

The Inaugural MedFemTech Congress

Promoting emerging medical solutions for women to improve diagnostics and treatment

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MedFemTech: a glimpse into the future

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Over 350 people from 38 countries gathered at the Palais des Congres in Paris on May 9-10, 2023 for the Inaugural MedFemTech Congress. The event was co-founded by Forbes France, Clalit Health Services, IVF Worldwide, and featured McKinsey & Company as a Knowledge Partner. It brought together stakeholders from all parts of the healthcare ecosystem: clinicians, patient associations, scientists, startups, investors, large healthcare system executives, pharma and med tech industry leaders. It was the first time that stakeholders from diverse backgrounds were in the same room, bringing their cross-functional expertise to discuss Women Health's priorities.

As part of this event, 40 startups presented their innovation. We are excited to introduce to you some of the exciting solutions that were presented and give you a glimpse into the future.



Around 140 million babies are born the every year in world (1). 20% of be born babies will via cesarean section (2) and NUA Surgical has developed the

patented SteriCISIONTM C-section retractor, which improves access and visualization during c-section surgery, ultimately making it a safer procedure. The start-up was spun-out of the University of Galway and BioInnovate Ireland in 2019 and has been recognised internationally for its innovation in maternal health.

Did you know that suicide is one of the leading cause of death for women during preconception, pregnancy, and early motherhood? 75% of depression and anxiety cases go undiagnosed (3). The startup Dana aims



to transform maternal mental health from pre-conception to early motherhood. Dana's app is currently undergoing medical device certification and clinical trials are conducted in Spain with hospitals and research centers. However, it is not always easy to conceive. About 500,000 babies will be born with the support of IVF (4).

IMMA Health, a French-Israeli company, is



developing a solution to enable at-home daily individualized monitoring of follicles leveraging AI, which will not only make IVF more convenient and less stressful, but will ultimately improve success rates. IVF is the first application of IMMA's transvaginal self-scanning system - it can shift the paradigm in multiple areas of women's health.



UK-based Calla Lily Clinical Care has developed a new vaginal drug-delivery system that can improve IVF outcomes through more convenient and more precise progesterone delivery. Future potential

applications include miscarriage prevention, menopause and bacterial vaginosis.

YON E Global is bringing to market a Dutch-designed medical e-health device to self-screen vaginal markers (e.g., vaginal pH, markers linked to ovulation) to empower women to

take control of their overall vaginal health. As part of their mission, YON E has launched the largest European femcare marketplace, introducing top femcare brands to Europe for the first time.



On the other side of the equation, nearly half of all pregnancies are unintended and we need better options for contraception. When considering intrauterine devices, over 40% of women fear pain and the cervical tenaculum (5), a traumatic, obsolete gynecological instrument. ASPIVIX, a Swiss startup, is bringing to market Carevix[™], an innovative cervical device that reduces pain and bleeding during fertility and gynecological t r a n s c e r v i c a l procedures. The first application is IUD insertion and the device has shown



significant reduction in pain by 73%, in bleeding by 78% and in the number of women who experience intense pain by 88%.

Every year, four million women around the world are diagnosed with breast or gynecological cancer (6) (i.e., vulva,



vagina, cervix, uterus, fallopian tubes, or ovaries). IvyNext built a system that enables painless vaginal exams to encourage more women to get screened. The procedure can

be performed at a discreet distance, without speculums and stirrups. Ivy uses air pressure to dilate tissues using a tampon-sized probe and offers high-resolution visibility of the cervix and entire vagina. It integrates Colposcopy with AI and big data analytics for early detection of cervical cancer.

For women diagnosed with HPV and cervical dysplasia, from ASCUS to CIN1-CIN3 (the most severe grade before becoming cancer), US-based Amplexd Therapeutics is developing two novel, low-cost, topical treatments for HPV-induced cervical dysplasia. If left untreated, cervical dysplasia can progress into cervical cancer. The first of the two treatments is an intravaginal suppository, used nightly for a 21-days to treat

low-grade dysplasia; and the second is a photodynamic therapy (PDT) system designed to selectively target dysplastic cells and act as a minimallyinvasive alternative



to conventional surgical removal of high-grade dysplastic lesions. The preclinical cell data shows incredible efficacy against both squamous and adenocarcinoma cell lines and both products have been prototyped. Amplexd is gearing up for clinical trials, expected to commence next year These treatments are non-invasive and provide an alternative to surgery.

Though it is less common, ovarian cancer causes more deaths than any other female reproductive cancers (7) and early detection is crucial. Nevia's platform, built by a team of experts in the fields of life science and data science, is

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Sources:

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- 3. Hirschfeld, The Comorbidity of Major Depression and Anxiety Disorders: Recognition and Management in Primary Care, Primary Care Companion to the Journal of Clinical Psychiatry, 2001
- 4. Fauser, Towards the global coverage of a unified registry of IVF outcomes, RBMO, 2019

designed to decode biomarker data from vaginal secretions using machine learning and AI. The company's biomarkers enable identification of women's diseases, and its first proof of concept



is detection of ovarian cancer using a simple vaginal swab.



For breast cancer survivors, Lattice Medical, a French startup is focusing on breast reconstruction. The MATISSE implant is a bioabsorbable tissue engineered chamber

that allows natural tissue regeneration of autologous fat tissue. After three to six months, the implant slowly resorbs leaving the patient with a full breast made of her own tissues, and no foreign objects in the body (such as a Silicon implant).

Menopause is a stage of life that women can spend one third of their lives in. With increases in life expectancy, it is estimated that 1.2 billion women will be in menopause

in 2030 (8). Moona's first product is a smart cooling pillow pad that regulates the temperature around the head & neck in order to prevent night sweats and hot flashes, which affect 80% of



women in perimenopause (9). Real-life evidence shows +35min extra sleep per night for women over 45. Beyond menopause, Moona is building science-backed technology to proactively improve sleep for all.

These innovations are empowering women to take charge of their health and live their lives to the fullest. While there is still work to be done and significant gaps remain to fund and ensure access to these innovations, the future is filled with promise. As science and technology continue to advance, we can look forward to even more breakthroughs that will improve the overall health of women. By investing in research and fostering open dialogues, we can create a society that values and prioritizes women's health at every stage of life.

DISCLAIMER: McKinsey & Company does not endorse or sponsor any products mentioned in this article.

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